Bulletin of the British Ornithologists' Club

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MEETINGS are normally held in the **Sherfield Building** of **Imperial College**, South Kensington, London SW7. The nearest Tube station is at South Kensington; a map of the area will be sent to members, on request. (Limited car parking facilities can be reserved [at a special reduced charge of **£5.00**], on prior application to the Hon. Secretary.)

The cash bar is open from **6.15 pm**, and a buffet supper, of two courses followed by coffee, is served at **7.00 pm.** (A vegetarian menu can be arranged if ordered at the time of booking.) Informal talks are given on completion, commencing at about 8.00 pm.

Dinner charges are **£22.50** per person (since 1 January 2007).

FORTHCOMING MEETINGS

See also BOC website: **http://www.boc-online.org**

29 January 2008—Dr Nigel Collar—*Birds and people.* The talk is a skitter across the man/bird interface, glancing at myth, imagery, art, poetry, utilisation in all its aspects, services, science, values and overall importance to human welfare and freedom, loosely based on a book of the same name being launched in December 2007. Nigel Collar has worked for over three decades for BirdLife International, first as Chairman of what was then the ICBP Bustard Group, then 1981–2001 as compiler of the International Bird Red Data Book, and since 2001 as Leventis Fellow in Conservation Biology, in which capacity amongst other things he supports PhD research on threatened birds in various parts of the tropics (Botswana, Cambodia, Peru, Philippines), undertakes field work on threatened birds (Brazil, Ethiopia), works on taxonomic issues relating to the BirdLife world checklist of birds, and sits on advisory boards of conservation foundations in Colombia, Monaco, Spain, UK and USA.

Applications to Hon. Secretary (address below) by ***15 January 2008***

11 March 2008—Lars Svensson—*Warblers in the Caucasus*. Lars Svensson is the author of *Identification guide to European passerines* (1992), co-author of the *Collins Bird Guide* (1999) and *Philip's guide to birds of Britain and Europe* (2007). He has written numerous identification papers in ornithological journals, and published *Soviet birds* (1984; a cassette of bird voices) and *Fågelsång i Sverige* (1990; *Bird song of Sweden*, a CD and booklet treating 90 common Swedish species). He was editor of *Vår Fågelvärld*, the periodical of the Swedish Ornithological Society, in 1971–74, and founded the Swedish rarities committee, being its chairman in 1972–86. A member of the Taxonomic Sub-Committee of the British Ornithologists' Union since 2005, lecturer about birds, and for many years tour leader. Lars has conducted extensive taxonomic research in museum collections and in the field. He holds an honorary doctorate from Uppsala university.

Applications to Hon. Secretary (address below) by ***26 February 2008***

The following dates have been selected for the remainder of 2008:

29 April—AGM and programme of mini-talks
8 July—speaker to be confirmed
23 September—Richard Price—*Birds of Morocco*
4 November—speaker to be confirmed

Overseas Members visiting Britain are especially welcome at these meetings, and the *Hon. Secretary* would be very pleased to hear from anyone who can offer to talk to the Club giving as much advance notice as possible—please contact: S. A. H. (Tony) Statham, Ashlyns Lodge, Chesham Road, Berkhamsted, Herts. HP4 2ST, UK. Tel. +44 (0) 1442 876 995 (or e-mail: boc.sec@bou.org.uk).

Bulletin of the BRITISH ORNITHOLOGISTS' CLUB

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CLUB ANNOUNCEMENTS

The Club welcomes the following new members who have recently joined the Club: Mr E. Lomruveol (Poland), Mr M. Greco (Italy) and Ms V. Bentley (UK).

It is with regret that the deaths of the following members have been recorded: I. R. Bishop (1994 and Committee 2003–07), Ms D. Breese (2002), J. W. Nash (1986) and T. R. Smeeton (2002).

Members are reminded that subscriptions for 2008 are due on 1 January and are kindly asked to check that Standing Orders are recorded at the correct amount (£20 per annum).

The 945th meeting of the Club was held on Tuesday 10 July 2007, in the Sherfield Building Annexe, Imperial College, London. Fourteen members and seven guests were present.

Members attending were: Cdr. M. B. CASEMENT, RN (*Chairman*), Miss H. BAKER, F. M. GAUNTLETT, A. GIBBS, D. GRIFFIN, K. HERON, R. R. LANGLEY, D. J. MONTIER, P. J. OLIVER, R. C. PRICE, P. J. SELLAR, S. A. H. STATHAM, M. J. WALTON and P. J. WILKINSON.

Guests attending were: Mrs C. R. CASEMENT, Mrs M. H. GAUNTLETT, Ms B. HAMMOND-GIBBS, Mrs J. A. JONES, Mrs M. MONTIER, Mrs M. OLIVER and Prof. C. M. PERRINS (*Speaker*).

After dinner, Prof. Christopher Perrins provided a comprehensive and detailed history of *Swan-upping*. Mute Swans *Cygnus olor* were somewhat overlooked by ornithologists for a long time, perhaps because it was thought by some that they were introduced by Richard I after the Crusades? It is unclear where this myth arose, but there are many subfossils in the East Anglian fens. Thus, there is every reason to suppose the Mute Swan was well established and widespread in England before Man. In perhaps the 12th century, the Crown claimed ownership of all swans except those on private waters and appointed a 'Master of the Swans' whose duties were to oversee the management through a hierarchical arrangement of regional deputies. It also gave rights of ownership to local dignitaries who had to pay for the privilege. Since several owners could own birds on the same water, a marking system was essential and an elaborate set of bill marks was developed and a 'roll' of local owners was carried at Swan-upping. Some cygnets were taken for eating and the remainder released. At the same time they were also pinioned. So, for many centuries, virtually all British Mute Swans were flightless. Rounding up the birds was a considerable effort and as domesticated waterfowl became more widespread, so the impetus for Swan-upping dwindled. Most rights to ownership ceased in the second half of the 19th century. Today only two livery companies, the Vintners and the Dyers (who were afforded rights in 1472 and in or before 1483 respectively), and the Ilchester family, retain their rights; the latter at the colony at Abbotsbury, Dorset.

Traditional Swan-upping only occurs on the Thames where they are caught by six rowboats, two for the Crown and two each for the Vintners and the Dyers. Nowadays, of course, none is taken for the table. The operation monitors the health of the population and is used to educate local children. The marking method has also changed; formerly, nicks on the side of the beak were used, but in 1997 both companies switched to rings.

Vintners' records date from 1723 and, while some caution is needed in interpretation, we can analyse changes since *c.*1900. When numbers started to increase, it was clear that the main cause was that birds were incomers, with most probably coming from new habitats, e.g., gravel pits in the Thames Valley. Controls were attempted, but these were curtailed during World War II (during which many were killed by bombing and oiling, whilst hungry people probably poached others). After the war culls were

discontinued and the population rocketed. However, within the space of *c.*15 years, the population declined steeply. Only the Swan-uppers noticed and only they had the data to prove it. Lead poisoning, largely due to swans swallowing lead angling weights, caused high mortality leading to the sale and use of many lead weights being banned. Results have been dramatic, with the national population roughly doubling and increases on the Thames being even larger. Nonetheless, the future holds problems: injuries from fishing tackle remain the largest single cause of injuries, whilst collisions with overhead cables are also an important cause of mortalities. Increasing boat traffic causes erosion of banks and leads to the loss of submerged plants. The increased tendency to concrete the bank, farming up to the river edge, and increased use of the bank by people all make it harder for swans to find nest sites.

Finally, it is interesting to question why the Mute Swan was not hunted to extinction? Many other animals were, including some of the large birds, like White-tailed Eagle *Haliaeetus albicilla*, Crane *Grus grus* and Great Bustard *Otis tarda*. Yet the Mute Swan, possibly even more vulnerable because it was easily caught when flightless during moult, was not. By today's standards, the Mute Swan was really rather roughly treated, but perhaps Royal protection enabled the bird to survive?

Bull. BOC and the SCON

Since January 2007, the Hon. Editor has been pleased to welcome a new initiative: all papers introducing a new name or nomenclatural act are reviewed by a member of the Standing Committee on Ornithological Nomenclature (SCON) of the International Ornithological Committee (IOC), in addition to the usual peer-review process. Given that the *Bulletin* is one of the primary venues for the publication of new taxa and, especially, papers on nomenclatural issues, we view this new relationship as being of considerable benefit to both parties. Remarks from members of the SCON have been received on the recent paper by McAllan (*Bull. Brit. Orn. Cl.* 127: 136–145), for which see pp. 268–282 of this issue, as well as one of the cases raised by Pacheco & Whitney (2006, *Bull. Brit. Orn. Cl.* 126: 242–244). These authors proposed that *Forpus sclateri eidos* Peters, 1937, be replaced by the name *modestus* Cabanis, 1848. This case has been a subject of discussion within the SCON and, whilst Pacheco & Whitney are correct in their assertion, the supporting Article 57.8.1 of the ICZN Code, which states 'Homonymy between identical species-group names in combination (originally or subsequently) with homonymous generic names having the same spelling but established for different nominal genera (Art. 53.2) is to be disregarded', was not cited in explanation. Authors of such papers will, in future, be expected to include reference to the specific articles in the Code that apply to the case at hand and support their conclusions. It is a requirement that the members of the SCON's review panel will ensure is met. The 12 members of the SCON are: Dr Per Alström (Sweden), Prof. Walter J. Bock (USA and Commissioner, International Commission on Zoological Nomenclature), Dr Richard C. Banks (USA), Edward Dickinson (UK), Robert Dowsett (representing Africa), Mary LeCroy (USA), Dr Michel Louette (Belgium), Prof. Hiroyuki Morioka (Japan), Dr Christiane Quaisser (Germany), Dr Richard Schodde (Australia and Chair of the SCON), Dr Frank Steinheimer (Germany) and Dr Carlo Violani (Italy).—The Editor.

REFEREES

I am grateful to the following, who have reviewed manuscripts submitted to the Bulletin during the last year (those who refereed more than one manuscript are denoted by an asterisk in parentheses): Mark P. Adams, Adrián Azpiroz, Richard Banks, Walter J. Bock, Walter E. Boles, Murray Bruce, Daniel Cadena (*), Santiago Claramunt, Charles Collins, Edward C. Dickinson (*), Bob Dowsett (*), Jon Fjeldså (*), Luiz P. Gonzaga, Steven Gregory (*), Bennett Hennessey, Julian Hume, Johan Ingels, Morton & Phyllis Isler, Alvaro Jaramillo, Michael C. Jennings, Kevin P. Johnson, Allan Keith, Michel Louette, Francisco Mallet-Rodrigues, Storrs Olson (*), Fernando Pacheco, David Parkin, Mark Pearman, Alan Peterson (*), Richard Porter, Marcos Raposo (*), Pamela C. Rasmussen, Van Remsen (*), Mark Robbins (*), Colin Ryall, Peter Ryan, Thomas S. Schulenberg, Luís Fábio Silveira, David Snow, Frank Steinheimer, Lars Svensson, Joseph Tobias, Dariús Tubelis, Don Turner, David Wells, Bret M. Whitney and Kevin J. Zimmer (*).—The Editor

A new species of brush finch (Emberizidae: *Atlapetes*) from the northern Central Andes of Colombia

by Thomas M. Donegan

Received 11 May 2007; final revision received 4 October 2007

Brush finches *Atlapetes* are Neotropical passerines which achieve greatest diversity in the Andes and whose taxonomy and ecology have received considerable recent attention. Several species are restricted to particular elevations, mountains or slopes (Remsen & Graves 1995). Even recently, *Atlapetes* taxa new to science have been described (Fitzpatrick 1980, Remsen 1993, Valqui & Fjeldså 1999, Donegan & Huertas 2006), and one species thought possibly extinct was rediscovered (Agreda *et al.* 1999). Other populations, such as those in the Serranía de Perijá (Donegan & Huertas 2006) and *A. tricolor* taxa (García-Moreno & Fjeldså 1999), demand further study.

The Central Andes is the oldest and highest of Colombia's three principal Andean ranges and a major centre of avian endemism (Stattersfield *et al.* 1998). During the 19th and 20th centuries, several bird collectors were active in this cordillera, particularly near Colombia's second-largest city, Medellín, and the coffee-growing region around Manizales and Pereira. Such collectors (per Cuervo *et al.* 2001) included: T. K. Salmon (1872–78: Sclater & Salvin 1879), M. A. Carriker (1941–53: see Graves 1988, 1997), K. von Sneidern (1938–52: Fjeldså & Krabbe 1990), M. A. Serna (1971–91: Sociedad Antioqueña de Ornitología [SAO] 2003) and participants of several American Museum of Natural History expeditions (Chapman 1917). Over the last decade, the northern Central Andes has been a focus for ornithological research and conservation efforts, due to the activities of SAO members, research and collecting efforts led by T. Cuádros, A. M. Cuervo *et al.* at the Universidad de Antioquia (e.g. Cuervo *et al.* 2005), and expeditions and conservation work by Fundación ProAves (e.g. Salaman *et al.* 2002, Quevedo *et al.* 2006, Salaman *et al.* 2007b), amongst others. The Central Andes have yielded several new bird species in recent years (Robbins *et al.* 1994, Graves 1997, Cuervo *et al.* 2005, Krabbe *et al.* 2005), including one found to date only in the northernmost section in dpto. Antioquia (Cuervo *et al.* 2001), with a further taxon from the same region awaiting formal description (*cf.* Salaman *et al.* 2007a).

Methods

In 2004–05, during research for the description of *Atlapetes latinuchus yariguierum* (Donegan & Huertas 2006), I inspected specimens of all Colombian *Atlapetes* in various South American and European collections, including all *A. schistaceus* taxa in the following institutions: Instituto de Ciencias Naturales, Universidad Nacional, Bogotá (ICN); Instituto Alexander von Humboldt, Villa de Leyva (IAvH); Museo de

la Universidad de la Salle, Bogotá (MLS); Museo de Historia Natural, Universidad Industrial de Santander, Bucaramanga (UIS); the Phelps Collection, Caracas (COP); Natural History Museum, Tring (NHM); University Museum of Zoology, Cambridge, UK (UMZC); and Museum d'Histoire Naturelle, Paris (MNHN). I was provided with details of *Atlapetes* specimens held at all other collections holding Colombian birds by Project Biomap. James Dean and Andrés Cuervo inspected specimens at the only other museums in which Antioquian *A. schistaceus* are found: the Smithsonian Institution, Washington DC (NMNH) and Museo del Colegio San José, Universidad de la Salle, Medellín, Colombia (MCSJ) respectively. Specimens consulted are listed in Donegan & Huertas (2006), with the addition of all NHM material of southern grey *Atlapetes* taxa: *A. nationi*, *A. seebhomi*, *A. seebhomi simonsi*, *A. leucopterus*, *A. schistaceus taczanowskii*, *A. rufigenis* and *A. forbesi*, and MCSJ specimens discussed further below.

Three specimens labelled *Atlapetes schistaceus* (Slaty Brush Finch), probably all collected at a Universidad de la Salle retreat called La Lana, near San Pedro de los Milagros, in the northern Central Andes of dpto. Antioquia, are clearly not of that species. Although sharing the greyish plumage of *A. schistaceus*, they exhibit a reduced moustachial stripe and have a paler mantle, underparts and crown.

Jorge Avendaño, Blanca Huertas and I conducted four days of field work at La Lana in January 2007. We erected up to 18 mist-nets in the largest remnant forest in the vicinity and made observations using playback of *Atlapetes* in other habitats and at other elevations (2,500–2,800 m). Andrés Cuervo spent one day searching the area in September 2006 and Juan David Ramírez made further visits in 2006. None of these searches, nor other observations in the Medellín region by SAO observers over the last two decades (SAO 2003), have resulted in any observations of the undescribed taxon. However, multiple observations and one mist-net capture of Rufous-naped Brush Finch *A. latinuchus elaeoprorus* and an observation of Slaty Brush Finch *A. s. schistaceus* were made. These two species are also found in 20th century La Lana collections.

Description of new species

A. schistaceus was described from early Bogotá skins by Boissoneau (1840). It remains rather common in the hills overlooking Colombia's capital (ABO 2000) and the nominate subspecies also occurs in the Central and West Andes (Paynter 1972). Other subspecies of *A. schistaceus* in Colombia are found in the Tamá massif, on the Colombian/Venezuelan border (*tamae*), and the Perijá Mountains (*fumidus*). The description of *A. schistaceus* is of a bird with strong moustachial markings (Boissoneau 1840). The two other subspecies, in the north-east of the country, share the same facial pattern, but differ in mantle and crown plumage darkness, lack of a speculum and in having more extensive black on the forehead. Of the two forms labelled *A. schistaceus* in Colombian museums, it is therefore the pale Antioquia population that is undescribed. Given recent findings of genetic differences, morphological variation and lack of intergradation between allopatric and sympatric

Atlapetes populations in the Andes (see below), a hitherto undescribed species is clearly involved. I propose to name it:

Atlapetes blancae sp. nov.
Antioquia Brush Finch
Gorrión-Montés Paisa

Type specimens.—Holotype.—ICN 19015, unsexed and undated, collected at San Pedro, Antioquia, from the collection of Hermano Daniel and labelled '*A. schistaceus* subsp.', with no further data (Fig. 3). Paratypes.—1. MCSJ 0242, an adult male collected by Hermano Marco Antonio Serna, at San Pedro, Antioquia, on 10 June 1971. 2. MLS 7553, also from 'Antioquia' (unsexed, undated, no further locality or collection details). Serna's handwritten notes state that the MSCJ skin had 'very developed testicles' and thus is apparently an adult male. The MLS skin is labelled '*A. schistaceus* joven' (young). However, no ossification data are presented and this assignment may have represented an attempt to explain its different plumage from *A. schistaceus*. It is probable that all three types were collected near Universidad de la Salle's seminary outside San Pedro de los Milagros in the Central Andes of dpto. Antioquia.

Diagnosis.—The new species is a typical large nine-primaried finch of the genus *Atlapetes*, sharing certain characters with *A. schistaceus*, including overall greyish plumage, a rufous crown and (narrow) moustachial stripe (Paynter 1972, 1978). It differs from all *A. schistaceus* taxa in its paler grey back, underparts and flanks, weaker moustachial stripe, paler and broader band of rufous in the crown, greyish not white supraloral markings, longer culmen and, from some subspecies (including populations of *A. schistaceus* in Antioquia), by the lack of contrast between the throat and rest of the underparts.

A. blancae is distinguished from the subspecies of *A. latinuchus* in the region (*A. l. elaeoprorus*) by its greyish (not yellow) underparts and supraloral markings, paler grey back and paler rufous crown. It differs from White-winged Brush Finch *A. leucopterus* taxa by its longer wings and tail, darker rufous crown, more uniform grey underparts (less contrasting melanism on the flanks), lacking or reduced white wing speculum and from individuals of some subspecies in lacking black on the forehead or white patches on the head. *A. leucopterus* occurs in northern Peru and throughout Ecuador, and is apparently spreading slowly north (Ridgely & Greenfield 2001), but has yet to be recorded in Colombia (Salaman *et al.* 2007a).

A. blancae can be separated from its congeners in the Central Andes—Dusky-headed Brush Finch *A. fuscoolivaceus*, Yellow-headed Brush Finch *A. flaviceps* and White-throated Brush Finch *A. albinucha*—by its rufous crown patch, lack of yellowish tones and monochrome wings, body and tail. No *Atlapetes* found to date in Colombia closely resembles *A. blancae* in plumage.

A. blancae superficially resembles various other grey southern *Atlapetes* species (in addition to *A. leucopterus*). It differs from Rufous-eared Brush Finch *A. rufigenis* and Apurímac Brush Finch *A. forbesi* of Peru in having only the crown (not other parts of the head) rufous, weaker moustachial and supraloral markings, and greyer underparts; from Rusty-bellied Brush Finch *A. nationi* and Bay-crowned Brush Finch *A. seebhomi* in its paler crown (except *A. s. simonsi*), lack of rufous in the vent, greyer underparts (except *A. nationi*) and lack of black chin or strong moustachial; and from Pale-headed Brush Finch *A. pallidiceps* and White-headed Brush Finch *A. albiceps* by its lack of white on the face and red crown, amongst other features.

Description of the holotype.—Capitalised colour nomenclature and numbers herein follow Munsell Color (1977, 2000). Crown uniform rufous (closest to 2.5YR 3/6 but paler) with no dark markings on forehead, and not strongly demarcated, with some rufous feathering on the upper mantle. (Such demarcation of the crown and mantle is individually variable in several *Atlapetes*: Vellinga *et al.* 2004, Huertas & Donegan 2006.) Mask jet black (not coded), with ear-coverts greyish (Gley 1 4/N). Mantle, wing-coverts and alula grey, tinged brownish (7.5YR 3.5/1), flight-feathers and rectrices darker dorsally (7.5YR 2.5/1), with concealed white (Gley 1 8/1) speculum at base of pp4–6, extending to just below tip of greater coverts. Underparts pale grey (Gley 1 7/N), washed slightly darker on flanks (Gley 1 5/N), with darkish but indistinct moustachial extending *c.*15 mm from base of bill (closest to Gley 1 3/N). Short but relatively broad line or crescent of pale grey (Gley 1 7/N) feathering on supraloral (broadly similar in size and extent to *A. l. elaeoprorus*; *cf.* larger supraloral spot in *A. schistaceus*). Bill and tarsus apparently dark horn, as in congeners. Relatively deep emarginations on at least pp8–5 (from innermost, following Proctor & Lynch 1993), but in wing moult, thus difficult to determine. Fresh outermost primaries, 9, 8 (almost fully emerged) 7 and emergent 6. Measurements (mm): wing chord 75; tail 74; tarsus 26.0; culmen (from tip of upper mandible to skull) 15.0. The brownish tones, shorter culmen compared to the paratypes and wing moult suggest a subadult moulting to adult plumage. Brownish and greenish tones are features of the mantle of juveniles or subadults of other northern *Atlapetes*, e.g. *A. latinuchus yariguierum* and *A. l. elaeoprorus* (Donegan & Huertas 2006). Holotype status is assigned to the ICN skin due to the superior type specimen collection and curation facilities at ICN, despite the holotype being not fully adult and the less complete locality data and lack of collection date. There can be little doubt that all three skins originate from the same 'San Pedro' and no doubt that they are of the same species.

Variation in the series.—MCSJ 0242 has a white speculum, formed by basal markings to pp4–7, which are less broad than in *A. s. schistaceus*, *A. l. elaeoprorus* or *A. leucopterus*. No brownish tones are present on the underparts, except a wash to the throat. The mantle appears from photographs to be darker (slate) grey than the

Figure 1. Plate by Robin Restall of (top to bottom) *Atlapetes latinuchus elaeoprorus* adult (left) and juvenile (right); *A. blancae* sp. nov. adult (left) and juvenile (right); and *A. schistaceus schistaceus* adult (left) and juvenile (right).

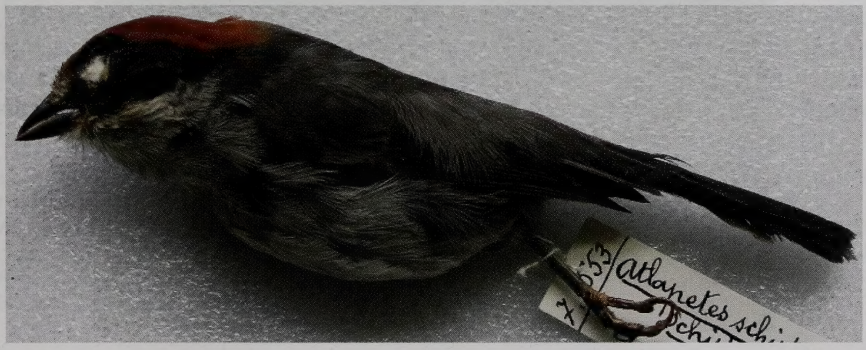

Figure 2. *A. blancae* paratype (MLS 7553) (T. M. Donegan)

other specimens. A few scattered rufous feathers are present over the grey supraloral. Measurements (mm): wing-chord 79, tail 77, tarsus 24.2, culmen 17.8. MLS 7553 differs from the holotype in having no strong brownish tones to the back or underparts, except a few markings in the moustachial area (Fig. 2). It lacks a white speculum. Measurements (mm): wing-chord 79; tail 78; tarsus 27.0; culmen 16.0. The overall less brownish tones of the paratypes and larger size suggest they are adults, and the holotype a subadult. Probable age-related variation in mantle coloration, similar to that shown here, is evident in various *A. latinuchus* taxa (Donegan & Huertas 2006). The presence of a speculum on just one of the specimens is intriguing. Individual and inter-population variation in speculum size also occurs in *A. latinuchus spodionotus* (Paynter 1972, Vellinga *et al.* 2004), and in a contact zone between *A. schistaceus tamae* and *A. s. schistaceus* (Donegan & Huertas 2006).

Remarks.—The three *A. blancae* specimens appear unlikely to represent an undescribed plumage of any known species. No *Atlapetes* is known to be strongly sexually dimorphic and the immature plumages of all species present in the northern Central Andes have been described. For example, juvenile *A. l. elaeoprorus* is similar to adults, but has greenish-olive tones on the back (Donegan & Huertas 2006). The hypothesis that *A. blancae* could represent juvenile *A. s. schistaceus* can be discounted as the MCSJ paratype is an adult male in breeding condition. Juvenile or subadult *A. s. schistaceus* in collections (n=11 of 87 skins examined), including from the East, Central and West Andes, are essentially similar to adults, but exhibit dark breast and belly streaking (Figs. 1 and 3; Restall *et al.* 2006), quite different from *A. blancae*.

Geographical variation in *A. schistaceus* cannot account for the plumage of *A. blancae*. No significant morphological differences, beyond average size and, possibly, some darkening of the crown and mantle in the Central and West Andes, are evident in *A. schistaceus*. Chapman (1917) noted that 'specimens [of *A. schistaceus*] from the Western and Central Andes average slightly larger than those from the Eastern', a proposition weakly supported by data presented herein (Appendix), but declined to describe any further subspecies within *A. s. schistaceus* due to the minor nature of any such variation.

Hybridisation between *A. l. elaeoprorus* and *A. s. schistaceus*, the other congeners known from the type locality, is improbable given the existence of three specimens and that *A. blancae* shows plumage features not found in either of those taxa (particularly its crown and mantle plumage, and speculum size). Similar

Figure 3 (opposite page). Dorsal and ventral views of, left to right: *A. latinuchus elaeoprorus* (ICN 20169; San Antonio de Piedras, Antioquia, April 1967); *A. blancae* holotype (ICN 19015); *A. s. schistaceus* (ICN 26220; Central Andes, Parque Nacional Natural Nevado del Huila, Paéz, Cauca, 31 October 1980); *A. s. schistaceus* (ICN 35012; West Andes, Paramillo National Park, Antioquia, 8 July 2004); *A. s. schistaceus* juvenile (ICN 22322; East Andes, Choachí, Cundinamarca, 27 May 1974) (T. M. Donegan)

principles suggest that *A. blancae* does not represent an undescribed colour morph of *A. schistaceus* or *A. latinuchus*. Neither a simple yellow to grey pigmentation switch (from *A. l. elaeoprorus*) nor a reduction in the moustachial marking (from *A. s. schistaceus*) could explain all of the morphological features exhibited by *A. blancae*. Surveys in the type locality region did not reveal any unusual plumages amongst *A. l. elaeoprorus* or *A. s. schistaceus*, nor are such aberrations evident in specimens from any region.

The description of a taxon based on three specimens without vocal or molecular data might be considered controversial. However, no other plausible hypothesis could explain the three specimens discussed herein. Evidence to recognise *A. blancae* appears equal to or stronger than that for other recently described and widely recognised species based on no or few field data, e.g. Bogotá Sunangel *Heliangelus zusii* (Graves 1993), Parker's Antbird *Cercomacra parkeri* (Graves 1997; since studied in the field) and Nechisar Nightjar *Caprimulgus solala* (Safford *et al.* 1995).

Distribution and conservation.—The collection locality of all three *A. blancae* specimens is probably close to Universidad de la Salle's seminary at La Lana, vereda Llano de Ovejas, near San Pedro de los Milagros, Antioquia, which is listed in Paynter & Traylor (1981) as 'La Lana': 06°23'N, 75°37'W. Over the past century, the Catholic brothers of Universidad de la Salle have maintained a small country retreat, principally for cattle farming and religious meetings, but with a few hectares of forest and second growth. Llano de Ovejas is a small plateau, at 2,400–2,800 m. The surrounding region has been largely converted to pasture for milk production and commercial flowers though various small forest fragments (*c.*5–10%) remain. One of the largest remnants is on a small ridge in the centre of the plateau, at *c.*2,650–2,800 m, and is protected as a watershed by Sr. José Leon, CORANTIOQUIA, the municipality of San Pedro de los Milagros and Universidad del Salle. This patch was the main focus of our field work but no *A. blancae* were found there.

A. latinuchus elaeoprorus, *A. s. schistaceus* and *A. albinucha* also occur in the northern Central Andes in Antioquia (Hilty & Brown 1986, Ridgely & Tudor 1989, Fjeldså & Krabbe 1990, Remsen & Graves 1995, Cuervo *et al.* 1999, Donegan & Salaman 1999, SAO 2003, Donegan & Huertas 2006). The two former taxa were found at La Lana during recent field work and are represented in mid-20th century collections from the type locality (MLS and MCSJ). *A. l. elaeoprorus* is not uncommon in forest, forest borders and scrub at 2,550–2,780 m in La Lana and occurs at lower elevations in the adjacent Valle de Aburrá above Medellín (SAO 2003). *A. schistaceus* was observed only at 2,800 m at La Lana and occurs only at high elevations in the region, with specimens from Santa Rosa de Osos and La Lana (Remsen & Graves 1995, MLS, MCSJ and NMNH specimens). *A. albinucha* occurs at lower elevations (generally below 2,200 m) in the wider region (Remsen & Graves 1995, Cuervo *et al.* 1999, Donegan & Salaman 1999, SAO 2003).

Remsen & Graves' (1995) data on *Atlapetes* distributions from the northern section of the Central Andes suggest a gap at premontane elevations on both slopes between 1,500 m and 2,500 m, above which *A. schistaceus* and *A. latinuchus elaeoprorus* occur and below which *A. albinucha* is found. However, we now know that *A. albinucha* occurs at higher elevations and *A. l. elaeoprorus* lower than Remsen & Graves (1995) indicated (SAO 2003), thus *A. blancae* does not completely fill this 'gap'. Elevational replacements appear less strongly marked in the genus *Atlapetes* in secondary habitats. For example, up to three *Atlapetes* occur at the same site, at 2,000 m, in Serranía de los Yariguíes in the East Andes (Donegan *et al.* 2007). Various other, more plausible, hypotheses for the status and distribution of *A. blancae* emerge: (1) *A. blancae* persists at La Lana but is rare or occurs only in microhabitats not studied to date. Rapid assessment field work of the type undertaken at La Lana in other localities has produced records of >90% of resident species found during subsequent longer term ProAves projects (93 bird species being recorded in our La Lana study), and such projects led to the description of various other new bird taxa (e.g. Cuervo *et al.* 2001, Salaman *et al.* 2003, Donegan & Huertas 2006). Various local people, amongst them amateur bird enthusiasts, identified *A. latinuchus* from plates and one—who took us to the site of our observation of the species—identified *A. schistaceus*, but no-one recognised our photographs of *A. blancae* specimens. Therefore, whilst searches should continue in this region, other hypotheses as to distribution should be considered. (2) *A. blancae* occurs nearby, but not at, La Lana. For instance, *A. schistaceus* was observed only at 2,800 m at La Lana, *c.*1 hour's walk from the seminary, where it was uncommon, but is represented by a specimen from the region, suggesting that 'San Pedro' and 'La Lana' specimens may have been collected over a wider area than merely the seminary grounds. The *páramos* north-west of San Pedro and valleys to the north merit additional searching. (3) Given the extent and recent nature of deforestation in the environs of the type locality, and presence of *A. latinuchus elaeoprorus* in all secondary and forest border habitats, it is possible that *A. blancae* is locally extinct. By way of analogy, Pale-headed Brush Finch *A. pallidiceps* went undetected for many years despite specific searches, but was eventually rediscovered (Agreda *et al.* 1999). Hopefully, *A. blancae* will also be found again.

A. blancae is best categorised as Critically Endangered under category D1, with a precautionary population estimate of <50 mature individuals, consistent with other bird species on the IUCN Red List for which no population is known, threats are intense, but hope remains for survival (S. H. M. Butchart *in litt.* 2007).

Etymology.—The new species is dedicated to my beloved wife, Blanca Huertas, whose first name is formed as a first declension Latin feminine noun and declined in the genitive singular for the epithet. Blanca's companionship in the field and museum, as well as fund-raising, have contributed in no small part to the present work; this description also honours her contributions to Colombian lepidopterology, conservation and education.

The name 'Antioquia' refers to the region where the new species is found. Following English name guidelines developed by Gill & Wright (2006), the alternative adjectival form 'Antioquian' is not available due to current usage of Antioquia Bristle Tyrant for *Phylloscartes lanyoni*. The Spanish name 'Paisa' is used in Colombia to describe people and places of Antioquia, the provenance of *A. blancae*.

The proposed name *A. blancae* coincidentally alludes to the new species' distinctive plumage character, its overall paler plumage compared to *A. schistaceus*. 'Blanca' is Spanish for 'white' in the feminine form, though this root is not the etymology of the name *blancae*.

Discussion

Although its overall greyish plumage might suggest that *A. blancae* is related to *A. schistaceus* following Paynter (1978), it might be more closely related to taxa in the yellow-breasted *A. latinuchus* complex or White-winged Brush Finch *A. leucopterus*. Morphological analyses (Paynter 1972, 1978) held *A. schistaceus* and *A. rufinucha* (including *A. latinuchus*) to be delimited largely by the presence of grey or yellow underparts. However, Remsen & Graves (1995) suggested that various geographically close taxa with alternating grey and yellow underparts are more closely related to one another than to more geographically distant taxa with similar underparts, a hypothesis with some molecular support (García-Moreno & Fjeldså 1999).

Very conservatively and following flawed past taxonomic treatments for the genus (e.g. Paynter 1978), *A. blancae* could be considered a subspecies of *A. leucopterus*, which it resembles superficially in plumage and which has an allopatric but distant distribution. However, biometric differences between the northernmost, nominate subspecies of *A. leucopterus* and *A. blancae* are substantial (Appendix: *A. leucopterus* being an unusually small *Atlapetes*: Paynter 1972, Fitzpatrick 1980), whilst the ranges of the two are separated by over 600 km, suggesting long-term isolation. *A. blancae* and *A. leucopterus* are probably not closely related. Rather, parapatric or sympatric *Atlapetes latinuchus elaeoprorus* would appear more likely to be *A. blancae*'s closest relative.

A. l. elaeoprorus and *A. blancae* differ in just two of the morphological characters used in Donegan & Huertas' (2006) phylogenetic analysis of *Atlapetes*: absence/presence of grey plumage on underparts and extent of white speculum (visible/none or vestigal). *A. s. schistaceus* and *A. blancae* differ in breadth of moustachial stripe; presence/absence of paler feathering on the throat; and size of supraloral spot (three characters). *A. blancae* differs from nominate *A. leucopterus* in the size of the speculum and melanism of the flanks (two characters, plus apparently diagnosable tail- and wing-lengths). Other differences between *A. blancae* and these sympatric or parapatric species, e.g. crown and mantle colour, and biometrics, were not coded by Donegan & Huertas (2006) due to assumed non-discrete variation in the taxa studied therein.

Examining first differences from *A. l. elaeoprorus*, the switch from grey to yellow underparts among *Atlapetes* species has apparently occurred multiple times in the Andes (Remsen & Graves 1995, García-Moreno & Fjeldså 1999), whilst speculum size varies among some *Atlapetes* populations and is rather plastic (Donegan & Huertas 2006). Conversely, moustachial and supraloral differences, such as those between *A. blancae* and *A. s. schistaceus* represent principal differences between some current and proposed species-level taxa (Donegan & Huertas 2006). That *A. blancae*'s plumage is broadly similar to *A. leucopterus* of Ecuador could reflect a parallel grey / yellow plumage switch in different regions.

A. blancae is described at species level on the basis of: three specimens which discount other possible hypotheses; its substantial morphological differences from sympatric or parapatric *Atlapetes* in the region; disjunct range from *A. leucopterus* and biometric differences; and lack of evidence of intergradation with sympatric or parapatric taxa. The apparent presence of *A. blancae*, *A. schistaceus* and *A. l. elaeoprorus* at the same locality (at least until the 1970s) suggests that all could be treated specifically under a modern Biological Species Concept (Helbig *et al.* 2002), and thus most or all other species concepts in current use.

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APPENDIX: Biometric data for certain *Atlapetes* taxa

Data were taken from museum specimens by the author, updated from Donegan & Huertas (2006), with *A. blancae* removed from *A. schistaceus* and some additional specimens included. Data on *A. leucopterus dresseri* and *A. l. paynteri* are taken directly from Fitzpatrick (1980) due to lack of specimens at the museums visited, with bill-length data excluded as a different measurement was used. For all taxa except those mentioned above, data are presented in the form mean ± standard deviation (sample number). For *A. leucopterus* data based on Fitzpatrick (1980), no standard deviation data are available.

Taxon	Sex	Wing-chord (mm)	Tail (mm)	Tarsus (mm)	Bill (to skull) (mm)	Mass (g)
A. blancae	all	77.7 ± 2.3 (75.0–79.0) (3)	76.3 ± 2.1 (74.0–77.0) (3)	25.7 ± 1.4 (24.2–27.0) (3)	16.3 ± 1.4 (15.0–17.8) (3)	–
A. latinuchus elaeoprorus	all	75.9 ± 3.7 (69.0–81.0) (10)	73.7 ± 4.4 (67.0–80.0) (11)	27.1 ± 0.7 (26.0–28.0) (11)	15.9 ± 0.5 (15.0–16.5) (12)	28.9 ± 1.3 (27.5–30.3) (2)
	males	75.5 ± 3.5 (73.0–78.0) (2)	74.5 ± 2.1 (73.0–76.0) (2)	27.0 ± 0.0 (27.0–27.0) (3)	16.2 ± 0.3 (16.0–16.5) (3)	27.5 ± 0.0 (1)
	females	72.5 ± 4.9 (69.0–76.0) (2)	69.0 ± 2.8 (67.0–71.0) (2)	26.5 ± 0.7 (26.0–27.0) (2)	16.0 ± 0.7 (15.5–16.5) (2)	–
A. s. schistaceus	all	75.5 ± 3.3 (68.0–83.0) (80)	77.5 ± 4.5 (69.0–87.0) (81)	26.8 ± 0.9 (25.0–28.5) (82)	15.0 ± 0.6 (13.5–16.5) (80)	28.2 ± 2.6 (23.5–34.0) (11)

	males	78.0 ± 2.2 (74.0–83.0) (26)	80.3 ± 3.0 (75.0–86.0) (25)	27.0 ± 0.7 (26.0–28.5) (25)	15.0 ± 0.5 (14.0–16.0) (23)	28.5 ± 1.3 (27.0–30.0) (4)
	females	74.3 ± 2.6 (69.0–79.0) (28)	76.4 ± 3.4 (69.0–82.0) (27)	26.7 ± 0.8 (25.5–28.0) (29)	15.2 ± 0.7 (14.0–16.5) (30)	–
A. s. schistaceus West Andes	males	80.0 ± 1.7 (78.0–81.0) (3)	83.2 ± 1.3 (82.0–84.5) (3)	27.0 ± 0.5 (26.5–27.5) (3)	15.3 ± 0.8 (14.5–16.0) (3)	30.0 ± 0.0 (1)
A. s. schistaceus Central Andes	all	75.6 ± 1.5 (73.0–78.0) (8)	78.2 ± 2.6 (74.5–82.0) (8)	26.4 ± 1.1 (24.5–27.5) (6)	15.0 ± 0.7 (14.0–16.0) (6)	28.3 ± 0.4 (28.0–28.5) (2)
	males	76.5 ± 2.1 (75.0–78.0) (2)	78.5 ± 2.1 (77.0–80.0) (2)	27.0 ± 0.0 (1)	14.5 ± 0.0 (1)	–
	females	75.0 ± 2.0 (73.0–77.0) (3)	78.7 ± 3.5 (75.0–82.0) (3)	25.8 ± 1.3 (24.5–27.0) (3)	15.0 ± 1.0 (14.0–16.0) (3)	–
A. s. schistaceus East Andes	all	76.1 ± 3.1 (68.0–83.0) (46)	78.7 ± 3.7 (72.0–87.0) (45)	26.8 ± 0.8 (25.0–28.5) (48)	15.1 ± 0.5 (14.0–16.0) (46)	28.0 ± 3.0 (23.5–34.0) (8)
	males	78.0 ± 2.2 (74.0–83.0) (20)	80.2 ± 3.2 (75.0–86.0) (19)	27.0 ± 0.8 (25.5–28.5) (20)	15.0 ± 0.5 (14.0–15.5) (18)	28.0 ± 1.0 (27.0–29.0) (3)
	females	74.6 ± 2.4 (71.0–78.0) (19)	76.7 ± 2.9 (72.0–82.0) (18)	26.5 ± 0.6 (25.5–28.0) (20)	15.2 ± 0.7 (14.0–16.5) (21)	27.8 ± 5.5 (23.5–34.0) (3)
Atlapetes leucopterus leucopterus	all	66.5 ± 2.5 (62.0–71.0) (10)	59.8 ± 4.4 (55.0–65.0) (10)	25.8 ± 1.6 (23.0–27.5) (10)	15.6 ± 0.8 (14.5–17.0) (10)	–
Atlapetes leucopterus dresseri	males	65.5 (62.5–69.0) (12)	64.5 (61.0–69.0) (12)	24.4 (23.5–25.8) (12)	–	22.9 (20.7–26.0) (7)
	females	62.7 (57.5–65.0) (10)	62.3 (58.0–66.5) (10)	24.2 (23.3–24.7) (10)	–	22.5 (19.0–26.1) (7)
Atlapetes leucopterus paynteri	males	69.7 (67.5–72.0) (5)	72.0 (68.5–76.5) (5)	25.5 (25.0–26.3) (5)	–	24.6 (23.0–26.5) (4)
	females	66.8 (66.5–67.0) (2)	69.5 (68.2–70.8) (2)	25.8 (25.0–26.5) (2)	–	25.4 (25.0–25.8) (2)

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Stabilising the nomenclature of Australasian birds by invalidation and suppression of disused and dubious senior names

by Richard Schodde, Walter J. Bock & Frank Steinheimer

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In attempting to accept or reject 19 disused names for Australian birds, McAllan (2007) has made serial errors and omissions of fact, interpretation and procedure that, if not corrected promptly, will disrupt the nomenclature of the taxa involved. McAllan's actions are based on Art. 23.9, 'reversal of precedence', of the current

(fourth) edition of the *International code of zoological nomenclature* (hereafter the Code; ICZN 1999). This new article empowers individual revisers to suppress disused senior synonyms under specified conditions to avert nomenclatural disruption.

The Standing Committee on Ornithological Nomenclature of the International Ornithological Committee (SCON) has a particular interest in the names addressed by McAllan. It had earlier initiated steps to suppress all disused non-passerine names, as well as to (1) protect *Menura novaehollandiae* Latham for the Superb Lyrebird (Menuridae), (2) support the now widely used spelling *Xanthomyza* for the generic name of the Regent Honeyeater (Meliphagidae), and (3) reject the generic names *Atricha* Gould and *Aplornis* Gould for the scrub-birds (Atrichornithidae) and glossy starlings (Sturnidae) in respective favour of the long-established *Atrichornis* Stejneger and *Aplonis* Gould (Schodde & Bock 1997). Concerning the third issue, the International Commission on Zoological Nomenclature (the Commission) had recommended a case by case consideration of individual names, a procedure followed here.

Our approach is based on principles laid down in the cornerstone of the Code, its Preamble, particularly with respect to long-accepted names in their accustomed meaning. Names in contention are addressed in order of their treatment by McAllan (2007), for ease of cross-referencing, except that all non-passerines are grouped ahead of passerines. The terms Art. and Arts. refer to numbered regulations in the fourth edition of the Code. Scientific names follow Dickinson (2003) and English names Gill & Wright (2006). The date of Latham's *Supplementum Indicis ornithologici*, often cited today as 1802, is given as 1801 for reasons explained under *Menura novaehollandiae* Latham. Numbers against cases submitted to the Commission for decision have been allotted by the Commission.

Non-passerine names

Except for one name (*Pedionomus* Gould), McAllan's (2007) treatment of non-passerine names was reinterpreted from cases explained by Schodde & Mason (1997). On the presumption that the Commission would ratify them, and keeping to usage under Art. 82.1, Schodde & Mason had adopted decisions taken by the SCON to seek variable suppression of all senior disused names involved. The SCON took those decisions at its meeting at the 21st International Ornithological Congress (IOC), Vienna, in August 1994. Contrary to McAllan, the cases were referred to the Commission on 8 February 1997 but were never published because many of the disused names were amenable to disposal under Art. 23.9 of the then imminent fourth edition of the Code. Nevertheless, as shown by McAllan, a number cannot be so set aside; and these have since been resubmitted to the Commission for suppression (Schodde & Bock submitted, Cases 3415, 3418).

Those disused senior names, *nomina oblita*, that can be invalidated under Art. 23.9 are the genus-group names ***Lophorynchus*** Swainson, 1837 (Columbidae) and ***Cackatto*** Lauder & Brown, 1833 (Cacatuidae), and the species-group names

Psittacus multicolor Gmelin, 1788 (Psittacidae), ***Cuculus striatus*** Drapiez, 1823, ***C. tenuirostris*** Boie, 1828, ***C. barbatus*** Boie, 1828, ***C. assimilis*** Brehm, 1843, and ***Sylvia versicolora*** Latham, 1801 (Cuculidae)—see Table 1. To our knowledge, none has been used as valid since 1899, meeting the first set of specifications for invalidation under Art. 23.9.1.1. In attempting to reject them against in-use junior names as well, McAllan (2007) did not satisfy the second set of specifications stipulated in Arts. 23.9.2 and 23.9.1.2. These articles require that a junior, in-use synonym threatened by a disused name can only be retained if 'evidence' is given that it has been used as valid 'in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years'. McAllan's casual response, that the relevant junior names had been 'in regular use in the last 50 years', is not sufficient as evidence. Table 1 below instead satisfies the requirements of Arts. 23.9.2 and 23.9.1.2 for these names, now *nomina protecta*; thus precedence from the threatening senior synonyms lapses herein.

Psittacus hypopolius **J. R. Forster, 1794** (Psittacidae) can be deposed as the senior name for the Norfolk Parakeet *Cyanoramphus cookii* (G. R. Gray, 1859) under Art. 23.9, though not as argued by McAllan (2007). It was introduced for 'einen grossen, grünen Papagay' described from Norfolk Island on James Cook's second voyage to the Pacific. There is no surviving type material (Whitehead 1969), and Forster's sketchy description is ambiguous (Schodde 1997a: 217), applying partly to the *large but multi-coloured* Norfolk Kaka *Nestor productus* (Gould, 1836) and partly the *green but small* Norfolk Parakeet. McAllan identified it with the latter (as *cooki*, *sic*), yet he again did not satisfy Art. 23.9.1.2, nor did he fix the taxonomic application of *hypopolius* J. R. Forster unambiguously. Unambiguous fixation is necessary because Mathews (1943, 1946) had already used *hypopolius* for the now-extinct Kaka, opening the identity of the name to argument and threatening the already established name, *productus* Gould, for the Kaka. We have since discovered that Forster based *Psittacus hypopolius* on a mixtum of collected specimens of *Nestor meridionalis meridionalis* (J.F. Gmelin, 1788) and uncollected specimens of *N. productus*. Clearly, he identified his large "green" parrot on Norfolk Island with the Kaka of New Zealand's South Island. We shall now take steps to lectotypify or neotypify the name with material of *Nestor meridionalis meridionalis* to ensure that it does not displace *Nestor productus* (Gould, 1936).

Columba norfolciensis **Latham, 1801** (Columbidae) from Norfolk Island was treated as a *nomen dubium* by McAllan (2007) who left its status unresolved and potentially available for reapplication. His interpretation focused on Hindwood's (1965: 92) and Schodde's (1997b: 62) finding that the name was based on sketchy descriptions of two species of uncertain identity, one a possible member of the ground dove genus *Gallicolumba* now extinct, and the other perhaps the Common Emerald Dove *Chalcophaps indica* (Linnaeus, 1758) which still survives on the island. There is no known type material, but the description of the presumed

Gallicolumba could have been based on a drawing by John Hunter (Hindwood 1965). McAllan's suggestion that the name could be fixed by neotypifying the Hunter figure—or, correctly, the specimen represented by it (Art. 72.5.6)—is unsatisfactory because that figure cannot be matched with certainty to any known species, extant or extinct. It could even represent a vagrant White-headed Pigeon *Columba leucomela* Temminck, 1821, from Australia, a species for which *norfolciensis* Latham was used for much of the 20th century (e.g. RAOU Checklist Committee 1926, Peters 1937). Alternatively, Sibley & Monroe (1990) applied *norfolciensis* tentatively to *Chalcophaps indica*, based on the second species in the original description. Such diverse and confusing uses, not mentioned by McAllan, originally led the SCON and Schodde (1997b: 62) to advocate suppression of *norfolciensis* Latham. Accordingly, we have again applied to the Commission to do so (Schodde & Bock submitted, Case 3415).

***Columba picata* Latham, 1801, *Geopelia tranquilla* Gould, 1844, and *Columba argetraea* J. R. Forster, 1794** are three disused senior names of pigeons and doves (Columbidae) that were reintroduced by McAllan (2007) to replace the widely used species-group names *melanoleuca* Latham, 1801, *placida* Gould, 1844, and *spadicea* Latham, 1801, for the Australian Wonga Pigeon, Peaceful Dove and Norfolk Island race of the fruit pigeon *Hemiphaga novaeseelandiae* (Gmelin, 1789). Here the disused names cannot be invalidated under Art. 23.9.1.1 because all have been employed sporadically into the 20th century (McAllan 2007). Followed by Schodde (1997b), the SCON nevertheless proposed their suppression and has approved reapplication to the Commission to do so (Schodde & Bock submitted, Cases 3415, 3418) for the following reasons. The basis for seniority of *picata* over *melanoleuca* and *tranquilla* over *placida*, both pairs of names published simultaneously by the same authors, is a simple regulatory shift in nomenclatural practice, from page precedence in the early 20th century to choice by first reviser (Art. 24). Yet *melanoleuca* and *placida*, long accepted for two common and familiar Australian pigeons, have become entrenched and used consistently and prevailingly in literature dealing with Australian birds since the 1910s, in up to several hundred works or more, by scores of authors within the last 50 years alone. Replacing them with *picata* and *tranquilla* respectively, names unknown at species level today, would clearly upset stability and usage in nomenclature, contrary to the intent of the Code (Art. 23.2; Preamble; Principle 4, Introduction).

Although *spadicea* Latham has been employed for the extinct Norfolk Island fruit pigeon in barely 20 reference works in the last 50 years, its senior competitor, *argetraea* J. R. Forster has been used as valid in just four: Iredale (1937), who unearthed it, McAllan (2007), and Mathews (1943, 1946). Moreover, *argetraea* J. R. Forster was published in an obscure journal, along with other Forster papers in which disused senior names of Australian birds have already been suppressed by Opinion 410 of the Commission. In contrast, *spadicea* Latham continues to be used consistently, not only in Australasian handbooks, checklists and conservation

manuals (Schodde *et al.* 1983, Checklist Committee OSNZ 1990, Higgins & Davies 1996, Schodde & Mason 1997, Garnett & Crowley 2000, Holdaway *et al.* 2001, Clayton *et al.* 2006), but also in major global monographs and checklists (Peters 1937, Goodwin 1967 and subsequent editions, Baptista *et al.* 1997, Dickinson 2003, Steadman 2006). Keeping *spadicea* Latham helps maintain the nomenclatural currency of all these major reference works.

***Pedionomus* Gould, 1840.** McAllan's (2007) case for suppressing the last non-passerine name, *Pedionomus ocellatus* Gould, 31 October 1840, for the Australian Malleefowl (Megapodiidae), is inadmissible. It fails to satisfy Arts. 23.9.2 and 23.9.1.2 for the junior competing names, *Leipoa ocellata* Gould, 1 December 1840 (Malleefowl), and *Pedionomus* Gould, 1 December 1840 (Plains-wanderer), the date of which McAllan misquotes. Nor does it meet Art. 23.9.1.1. *Pedionomus ocellatus* Gould, October 1840, has, in fact, been used for the Malleefowl since 1899, by Bruce & McAllan (1990) who listed it as valid in their Appendix 1 and stated (p. 457): 'Therefore the Mallee Fowl should become *Pedionomus ocellatus* Gould, 1840'. This action is particularly destructive nomenclaturally because *Pedionomus* Gould, October 1840, preoccupies the long-accepted *Leipoa* Gould, December 1840, for the Malleefowl in seniority, and also *Pedionomus* Gould, December 1840, for the Plains-wanderer (Pedionomidae) in homonymy: it would require change in the universally used generic name for the Plains-wanderer from *Pedionomus* to *Turnicigralla* Des Murs, 1845. Accordingly, we have applied to the Commission to suppress *Pedionomus* Gould, October 1840, for the Malleefowl (Schodde & Bock submitted, Case 3415).

Passerine names

***Menura superba* Davies, 1802** vs. *Menura novaehollandiae* Latham, 1801, for the Superb Lyrebird (Menuridae) turns not on Art. 23.9 but the date of publication of Latham's latinised *Supplementum Indicis ornithologici* (Latham 1801a), either 1801 as printed on the title page, or 1802 according to some external evidence (Browning & Monroe 1991). If 1802 is accepted (=either 1 April 1802 or 31 December 1802 under Art. 21.3), then *Menura superba* Davies, 5 June 1802, could displace the now well-established *Menura novaehollandiae* Latham, 1801, for this species (Schodde & Mason 1999: 63).

Browning & Monroe's (1991) case for 1802 rested on three indirect coincidences affecting the companion work, *Supplement II to the General Synopsis of Birds* (1801b), in which the new species in the Latin *Supplementum* are described in English. First, the Latin *Supplementum* gives page references to the names in the English *Supplement II*, not the reverse. Thus it could not have been typeset until page proofs of the English work were available, and so was presumably printed and issued no earlier. It is likely, in fact, that the texts of both works were produced together because we have found that they were printed on the same paper with the same watermark (1800) in the same position on the pages. Secondly, only 250

copies of the English work were released (from Latham 1821, p. vi, footnote), indicative of a single issue. Thirdly, the English work was first demonstrated to be in existence when Latham presented it to the Royal Society on 1 April 1802, in accord with its date recorded in the donation lists of the *Philosophical Transactions of the Royal Society* (Anon. 1802a) and *Transactions of the Linnean Society* (Anon. 1802b). So Browning & Monroe reasoned that if the single issue of the English *Supplement II* did not appear until 1802, neither did the Latin *Supplementum*.

Yet the connection between the two works and 1802 is entirely circumstantial, and beset with inconsistencies. First, the plates of the vernacular *Supplement II* are dated 30 May 1801, although this is the date of printing, not release with the text. Secondly, copies of the English *Supplement II* have been found with different dates, either 1801 (five seen) or 1802 (two), whilst the figure of the Maned Duck *Chenonetta jubata* on the title page is coloured in those with 1801 and black and white in those with 1802. Thus there were at least two issues of the work, breaking the nexus between the Latin *Supplementum* and a single issue of the English *Supplement II* supposedly no earlier than 1 April 1802, its date of receipt by the Royal Society. Thirdly, the London publisher (Leigh, Sotheby & Son), not Latham, managed and distributed the Latin *Supplementum* and English *Supplement II* (Latham, 1821, p. vi, footnote), and was free to issue them at any time once they were printed. Living in Winchester, Latham received the copies that he donated to such bodies as the Royal and Linnean Societies only indirectly, and, making less frequent visits to London at the time (Latham *loc .cit.*, footnote), he could well have passed them on some months later than releases by the publisher.

Evidence for a date other than the 1801 specified in the Latin *Supplementum* thus hardly meets the levels of proof required in combined English and French versions of Art. 21.2 which fixes date of publication. Even so, we have requested the Commission for a ruling on the date because 1802 has come into increasing use in the last decade and because English and French versions of Art. 21.2 are open to differing interpretation (Art. 87), with potential to keep argument over the date of the Latin *Supplementum* alive (Schodde *et al.* submitted, Case 3414). In the interim, we recommend use of 1801 as the date of publication for the Latin *Supplementum* because, (1) in the spirit of Art. 82.1, it is still in wide use, and (2) we anticipate that the Commission will find, on the information available, that evidence for 1802 is insufficient. Keeping 1801 establishes the seniority of *Menura novaehollandiae* Latham, 1801.

***Xanthomyza* Swainson, 1837**, is an emended spelling (Art. 33.2.1) of the generic name *Zanthomiza* Swainson, 1837, for the threatened Regent Honeyeater (Meliphagidae). It was introduced into current international literature by Salomonsen (1967: 436) and to Australian literature by Condon (1968), and it has been used almost universally since, in journal papers and field lists, checklists, handbooks, atlases, field guides and conservation action plans approaching several hundreds. Notwithstanding use of *Xanthomyza* by Strickland in 1841, Swainson's

TABLE 1

Disused senior synonyms and spellings of some Australasian birds that should be deposed under Arts. 23.9 and 33.2/3 of the *International code of zoological nomenclature* (fourth edn.), together with competing in-use junior synomyms and spellings with supporting references. Sequence of names follows the order in the text.

Disused senior synonyms (*nomina oblita*) and spellings	**In-use junior synonyms (*nomina protecta*) and spellings**	**References validating the in-use junior name or spelling detail under Arts. 23.9.2 and 33.2.3.1/33.3.1, respectively**	**English names**
Lophorynchus Swainson, 1837	*Lopholaimus* Gould, 1841	Baptista *et al.* 1997, Beruldsen 2003, Blakers *et al.* 1984 and references therein, Clayton *et al.* 2006, Christidis & Boles 1994, Condon 1975, Dickinson 2003, Frith 1982, Gill & Wright 2006, Goodwin 1967, Higgins & Davies 1996 and references therein, Schodde 1997b and references therein, Schodde & Tidemann 1986, Sibley & Monroe 1990, Simpson & Day 1999, Wolters 1975–82, references to *Lopholaimus* in the journal *Emu* since 1957	Topknot Pigeon (genus)
Cackatto Lauder & Brown, 1833	*Eolophus* Bonaparte, 1854	Beruldsen 2003, Brown & Toft 1999, Clayton *et al.* 2006, Cooke *et al.* 2004, Dickinson 2003, Forshaw 1969, 1978, 1981, 2002, 2006, Garnett & Crowley 2000, Gill & Wright 2006, Higgins 1999, Holyoak 1970, 1972, Homberger 1991, Howard & Moore 1994, Joshua & Parker 1993, Juniper & Parr 1998, McAllan 2007, Rowley 1997, Schodde 1989, 1997c, 2006a,b, Sibley & Monroe 1990, Simpson & Day 1999, Stanger *et al.* 1998, Wolters 1975–82	Galah (genus)
Psittacus multicolor Gmelin, 1788	*Psittacus moluccanus* Gmelin, 1788, usually as *Trichoglossus haematodus moluccanus* (Gmelin)	Clayton *et al.* 2006, Condon 1975, Dickinson 2003, Forshaw 1969, 1978, 1981, 2002, 2006, Gill & Wright 2006, Higgins 1999 and references under *T. h. moluccanus* therein, Howard & Moore 1994, International Commission on Zoological Nomenclature Direction 82 —Melville & Smith 1987, Juniper & Parr 1998, Lendon 1973, McAllan 2007, Schodde 1997a and references under *T. h. moluccanus* therein, Simpson & Day 1999, Stanger *et al.* 1998, Wolters 1975–82, references to *Trichoglossus moluccanus* in the journal *Emu* 1957–75	Rainbow Lorikeet
Cuculus striatus Drapiez, 1823	*Cuculus saturatus* Hodgson, 1843	Blakers *et al.* 1984 and references to *C. saturatus* therein, Christidis & Boles 1994, Clayton *et al.* 2006, Condon 1975, Dickinson 2003, Gill & Wright 2006, Higgins 1999 and references to *C. saturatus* therein, Johnstone & Storr 1998, Mason 1997 and references to *C. saturatus* therein, Morecombe 2003, Payne 1997, Schodde & Tidemann 1986, Sibley & Monroe 1990, Simpson & Day 1999, Wolters 1975–82, references to *C. saturatus* in the journal *Emu* since 1970	Oriental Cuckoo
Cuculus tenuirostris Boie, 1828	*Cuculus saturatus* Hodgson, 1843	as above	Oriental Cuckoo

Cuculus barbatus Boie, 1828	*Cuculus saturatus* Hodgson, 1843	as above	Oriental Cuckoo
Cuculus assimilis Brehm, 1843	*Cuculus saturatus* Hodgson, 1843	as above	Oriental Cuckoo
Sylvia versicolora Latham, 1801	*Cuculus basalis* Horsfield, 1821, usually as *Chrysococcyx basalis* (Horsfield)	Beruldsen 2003, Blakers *et al.* 1984 and references under *Chrysococcyx basalis* therein, Christidis & Boles 1994, Clayton *et al.* 2006, Condon 1975, Dickinson 2003, Gill & Wright 2006, Higgins 1999 and references under *Chrysococcyx basalis* therein, Mason 1997 and references under *Chalcites basalis* therein, Payne 1997, Schodde & Tidemann 1986, Sibley & Monroe 1990, Simpson & Day 1999, Wolters 1975–82, references to *Chrysococcyx* or *Chalcites basalis* in the journal *Emu* since 1957	Horsfield's Bronze Cuckoo
Psittacus hypopolius J. R. Forster, 1794	*Platycercus cookii* G. R. Gray, 1859, as *Cyanoramphus cookii* (G. R. Gray)	Boon *et al.* 2001, Checklist Committee OSNZ 1990, Clayton *et al.* 2006, Collar 1997, Dickinson 2003, Forshaw 1978, 1981, 2002, 2006, Fortescue *et al.* 1999, Garnett & Crowley 2000, Gill & Wright 2006, Hermes *et al.* 1986, Hicks & Greenwood 1990, Higgins 1999 and references under *C. novaezelandiae cookii* therein, Howard & Moore 1994, Juniper & Parr 1998, Lane *et al.* 1998, McAllan 2007, Ovington 1978, Phipps 1981, Schodde 1997a, Schodde *et al.* 1983, Sibley & Monroe 1990, Stanger *et al.* 1998, Steadman 2006, Wolters 1975–82	Norfolk Parakeet
Zanthomiza Swainson, 1837	*Xanthomyza* Swainson, 1837	Beruldsen 2003, Blakers *et al.* 1984 and references under *Xanthomyza* therein, Christidis & Boles 1994, Clayton *et al.* 2006, Condon 1968, Dickinson 2003, Garnett & Crowley 2000 and references under *Xanthomyza* therein, Gill & Wright 2006, Higgins *et al.* 2001 and most references under *Xanthomyza* therein, Morecombe 2003, Salomonsen 1967, Schodde 1975, Schodde & Mason 1999 and references under *Xanthomyza* therein, Schodde & Tidemann 1986, Sibley & Monroe 1990, Simpson & Day 1999, Stanger *et al.*1998, Wolters 1975–82, references to *Xanthomyza* in the journal *Emu* since 1975	Regent Honeyeater (genus)
Aplornis Gould, 1/3 October 1836	*Aplonis* Gould, 1/3 October 1836	Amadon 1962, Beruldsen 2003, Blakers *et al.* 1984 and references under *Aplonis* therein, Christidis & Boles 1994, Clayton *et al.* 2006, Dickinson 2003, Garnett & Crowley 2000 and references under *Aplonis* therein, Gill & Wright 2006, Higgins *et al.* 2006 and references under *Aplonis* therein, Macdonald 1984, Morecombe 2003, Ovington 1978, RAOU Checklist Committee 1926, Schodde 1975, Schodde & Mason 1999 and references under *Aplonis* therein, Schodde & Tidemann 1986, Sibley & Monroe 1990, Simpson & Day 1999, Slater 1974, Stanger *et al.* 1998, Wolters 1975–82, references to *Aplonis* in the journal *Emu* since 1900	Glossy starlings (genus)

original *Zanthomiza* was employed throughout much of the first half of the 20th century in Australia, following endorsement by the RAOU Checklist Committee (1926). The current correction to *Xanthomyza* came from a decision of the SCON at the 12th IOC in Helsinki, in 1958, to request the Commission correct the spelling of several of Swainson's (1837) names for honeyeaters (Salomonsen 1960). The case was received by the Commission on 3 December 1965, but never proceeded to publication. The SCON reviewed the issue at the 23rd IOC, Beijing, in 2002, and found that the spelling *Xanthomyza* had by then come into 'prevailing use' as defined in the Code's Glossary and as justified in Table 1 herein. These circumstances invoke Art. 33.2.3.1, a ruling on spellings not considered by McAllan (2007), which deems *Xanthomyza* a 'justified emendation', with Swainson (1837) as author, after Salomonsen (1967). Thus the spelling *Xanthomyza* should be accepted as correct under the Code.

***Atricha* Gould, 1844** (January), is the senior but disused generic name for the Australian scrub-birds (Atrichornithidae) known today as *Atrichornis* Stejneger, 1885. Throughout the later 19th century into the 20th, however, its variant spelling *Atrichia* Gould, March 1844, had been used instead; this name was subsequently found to be invalid as a junior homonym of *Atrichia* Schrenk, 1803 (Insecta). *Atricha* itself, with no impediment in homonymy (Art. 56.2), remains available for the scrub-birds (Art. 12.2.6), even though it was used only once by Gould, in a newspaper report of the meeting at which he first described the Noisy Scrub-bird, now *Atrichornis clamosus* (Gould). In attempting to depose *Atricha* as disused, McAllan (2007) failed to satisfy Art. 23.9.1.2 and confounded his argument by suggesting that *Atrichia* Gould might be an incorrect subsequent spelling of *Atricha*. If it is, Art. 23.9.1.1 is breached as well, because *Atricha* Gould, in the incorrect subsequent spelling *Atrichia*, has been used as valid since 1899, e.g., in Campbell (1901) and in the journal *Emu* up to 1920; only after 1920 did use of *Atrichornis* Stejneger become entrenched.

This raises the question: should Gould names published first in newspapers (Bruce & McAllan 1990) be treated as of the same origin as those published subsequently in the *Proceedings of the Zoological Society of London* and Gould's folio, *The Birds of Australia*; or should they be treated as independent names that enter separately into synonymy and homonymy? If the former, different subsequent spellings in the *Proceedings* and folio, e.g. *Atrichia* Gould, become incorrect spellings; if the latter, *Atricha* Gould stands unused and deposable under Art. 23.9. We find the first interpretation to be correct because all names in newspapers, *Proceedings* and folio are linked by reference through to the same reading at the Zoological Society of London: the first are simply brief, preliminary notices of the impending formal description in the second and third. Accordingly, we have applied to the Commission for suppression of *Atricha* Gould, 1844 (Schodde & Bock, submitted, Case 3415).

***Aplornis* Gould, 1836a**, and *Aplonis* Gould, 1836b, are different spellings of the same generic name for the glossy starlings (Sturnidae) of south-east Asia and the western Pacific. In taking up the senior but disused *Aplornis* Gould, 1 or 3 October 1836, over the junior but almost universal *Aplonis* Gould, 18 October 1836, McAllan (2007) evidently treated *Aplonis* as a name of separate origin to *Aplornis*. As in the case of *Atricha* Gould and *Atrichia* Gould above, *Aplornis* and *Aplonis* were published respectively in an advance newspaper notice and a formal description in the *Proceedings of the Zoological Society of London*, drawn by reference from the one reading at the same meeting of the Society. *Aplonis* therefore becomes an incorrect subsequent spelling of *Aplornis*, controlled by Art. 33.3.1: 'when an incorrect subsequent spelling is in prevailing usage...the subsequent spelling ... is deemed ...correct...'. There can be no doubt that the spelling *Aplonis* is in prevailing use for the 24 species-strong genus of glossy starlings, being employed in virtually all current checklists, handbooks, atlases and field guides, global and regional, since Amadon (1962) and even Gould himself. Its usages that satisfy Art. 23.9.1.2 alone are given in Table 1. Thus it should be retained as correct under the Code, with Gould as author and 1 / 3 October 1836 as date (Gould 1836a).

***Psilopus albogularis* Gould, 1838**, vs. *Psilopus olivaceus* Gould, 1838. The species name *albogularis*, used for the common east Australian White-throated Gerygone through the 19th century and senior by choice of first reviser (Art. 24), was replaced by *olivacea* on misplaced grounds of page precedence early in the 20th, beginning with Stone (1913) and Mathews (1913). Nevertheless, *olivacea* has been used ever since the 1920s and employed in scores of journal papers as well as all major regional, national and international checklists, handbooks and field guides over almost the last 100 years.

There are other well-known names for Australian songbirds which, taken up by Mathews (1908, 1912) and the RAOU Checklist Committee (1926) on evident grounds of page precedence, are also junior to simultaneously published but disused synonyms through the action of earlier revisers (Art. 24). Those in Latham (1801), with the senior disused name first and the current in-use binomen last, are: (1) *Gracula picata* vs. *Corvus cyanoleucus* for the Magpielark *Grallina cyanoleuca* (Latham), Monarchidae, (2) *Gracula viridis* vs. *Coracias sagittata* for the Olive-backed Oriole *Oriolus sagittatus* (Latham), Oriolidae, (3) *Muscicapa crepitans* vs. *Corvus olivaceus* for the Eastern Whipbird *Psophodes olivaceus* (Latham), Eupetidae, (4) *Merops garrulus* vs. *Gracula melanocephala* for the Noisy Miner *Manorina melanocephala* (Latham), Meliphagidae, (5) *Muscicapa auricomis* vs. *Turdus melanops* for the Yellow-tufted Honeyeater *Lichenostomus melanops* (Latham), Meliphagidae, and (6) *Certhia mellivora* vs. *Merops chrysopterus* for the Little Wattlebird *Anthochaera chrysoptera* (Latham), Meliphagidae. None of the senior names in each pair has been employed since the first decade or two of the 20th century; and returning to them following the precedent advocated by McAllan (2007) would destabilise the nomenclature of some common Australian songbirds.

Accordingly, we have applied to the Commission for suppression of the senior names, including *Psilopus albogularis* Gould, 1838 (Schodde & Bock submitted, Case 3418).

Summary

For the 19 (not 18) names reviewed by McAllan (2007), corrections or qualifications are as follows. The first nine in-use but junior names (two generic, seven specific) in Table 1 are properly validated there over their respective senior but disused names under Arts. 23.9.1 and 23.9.2. The in-use spellings of the generic names *Xanthomyza* Swainson for the Australian Regent Honeyeater and *Aplonis* Gould for the west Pacific glossy starlings are acceptable as correct names under the provisions of Arts. 33.2 and 33.3. *Menura novaehollandiae* Latham is advisedly kept as senior to *Menura superba* Davies, with a publication date of 1801. For those seven disused or dubious senior names that cannot be invalidated under Art. 23.9 because of use in the 20th century, application has been made to the Commission for their suppression (Schodde & Bock submitted, Cases 3415, 3418). They are: *Columba norfolciensis* Latham of questionable identity, *picata* Latham for the Wonga Pigeon, *tranquilla* Gould for the Peaceful Dove (conditionally), *argetraea* J. R. Forster for the Norfolk Island fruit pigeon, *Pedionomus* Gould as the generic name for the Malleefowl, *Atricha* Gould as the generic name for the Australian scrub-birds, and *albogularis* Gould for the White-throated Gerygone. Under Art. 82, names in prevailing use are to be maintained in cases submitted to the Commission, pending decision.

We do not believe that McAllan's (2007) approach to nomenclatural change—that disruptions due to regulatory technicality should be 'worn' because they are fewer than those from taxonomic adjustment—should be endorsed for long-accepted, widely used names of genera and species. The two kinds of change are not comparable. Shifts due to investigative taxonomy, which the Code implicitly fosters (see Preamble), reflect developments in systematic knowledge and are part of progress in biological science; those due to nomenclatural regulation add to neither and may be contrary to Art. 23.2, the Preamble, and Principle 4 of the Introduction to the Code. Nomenclature functions to communicate, and its effectiveness depends on maximising stability: keeping the same name in the same spelling for the same taxon. We therefore encourage workers dealing in avian nomenclature to heed the Preamble of the Code and to use the ensuing provisions, including application to the Commission, to minimise disruptive change wherever reasonably possible.

The nomenclatural actions in this paper have been evaluated and approved by all responding members (ten) of the 12-member Standing Committee on Ornithological Nomenclature (SCON) of the International Ornithological Committee.

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Noteworthy bird records from the southern Chocó of Colombia

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The Chocó–Darién ecoregion complex extends from southern Panama to north-west Ecuador, and from the ridge of the Colombian Western Andes to the Pacific Ocean, and is one of the most biodiverse areas in the planet (Hernández-Camacho *et al.* 1992, Dinerstein *et al.* 1995). The Chocó is a centre of endemism for many taxonomic groups (Orejuela 1987), and the lowland forests between the southern Serranía del Baudó in Colombia and Esmeraldas province, Ecuador, comprise one of the most significant Endemic Bird Areas in South America (Stattersfield *et al.* 1998).

However, ornithological knowledge of the Colombian Chocó is still meagre, as many of its *c.*800 species (Stiles 1993, Rangel *et al.* 2004) have been recorded at only a few localities, mostly in the piedmont of the Western Andes, along the few roads connecting the Pacific coast to the interior: e.g. the Anchicayá Valley (Hilty 1997), La Planada (Orejuela 1987), the Pasto–Tumaco road (Salaman 1994) and the Río Ñambí Nature Reserve (Strewe 1999). Another important inventory is that of Rodríguez (1982) for Katios National Park, in the northern Chocó. Lowland forest and mangrove have been poorly surveyed, except for the classic inventory by

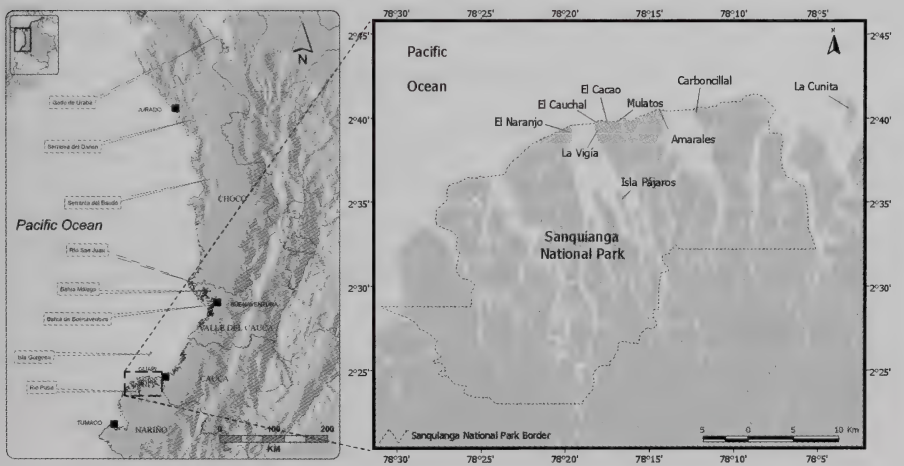

Figure 1. Map and location of the study site.

Olivares (1957a,b, 1958) of Guapi (Cauca), and a few notes on birds of mudflats and mangrove (e.g. Pearson-Ralph & Chaplin 1973, Naranjo *et al.* 1998, Morales & León 2000).

Since 1989, Asociación Calidris has been investigating coastal ecosystems in the Colombian Pacific, and since 1999 much of this work has focused on Sanquianga National Park, including bird surveys (Johnston *et al.* 2000), life-history studies (Johnston 2000, Ruiz 2004, Casas 2005, Cifuentes 2005, Johnston *et al.* 2005), shorebird population monitoring (Asociación Calidris 2003), and since 2000, an environmental education strategy centred on migratory species (Peña *et al.* 2004). We have recorded 143 species of birds in the coastal environments of Sanquianga and adjacent areas, 32 of which are of interest geographically: two represent second records for Colombia, 12 are first records for the Pacific coast of the country, 16 range extensions within the Colombian Pacific and two are new localities for Neotropical migrants.

Study site

Sanquianga National Park is on the north coast of dpto. Nariño, at 02°40'–02°22'N, 78°02'–78°05'W (Fig. 1), and is an Important Bird Area (Franco-Maya & Bravo 2005). Most of the 80,000 ha comprise the estuaries of the Sanquianga delta, whose shores are covered by the largest and best-preserved mangrove in Colombia (Garcés & Zerda 1994). At least eight settlements, mostly depending on fisheries and forestry lie within the park and possess a population of *c.*10,000 (MA-UAESPNN 1998). Within the park's buffer zone are several sandbars, islets and mudflats, some of them of considerable size, and covered by grasses, small wetlands with some emergent vegetation and a few trees (e.g. *Hibiscus tiliaceus*). One of the largest islets, La Cunita, represents one of the most important shorebird roost sites and feeding areas in Colombia (Naranjo *et al.* 2006).

Species accounts

Previous distributional data are primarily taken from Hilty & Brown (1986), or Ridgely & Greenfield (2001) for Ecuador. For many records we possess photographic evidence that is available at www.calidris.org.co/Sanquianga paper. Some specimens have been deposited in the Universidad del Valle (UV), Cali, and Instituto de Ciencias Naturales (ICN), Bogotá collections. A complete list of those species recorded in Sanquianga's coastal environments is available on request.

CINNAMON TEAL *Anas cyanoptera*

Three observed in small tidal ponds between Mulatos and La Vigía on 23 July 2000 (RJG), and RJG, CRG and YCS video-taped two in La Cunita and El Cauchal on 24 October 2003. Previously recorded on the Pacific coast of Colombia at Juradó. Our records represent a 500 km southerly range extension.

BARE-THROATED TIGER HERON *Tigrisoma mexicanum*
Found regularly at Carboncillal in April 1999 and in the mangrove of Amarales in April–July 2004. Not reported in Ecuador, but a few records in northern Peru (Valqui &Walker 1999) and in Colombia it also occurs in the lower Atrato and the Gulf of Urabá, and the río Sinú delta on the Caribbean coast (Estela & López-Victoria 2005). Our record represents a 600 km southerly range extension.

BLACK-CROWNED NIGHT HERON *Nycticorax nycticorax*
On 30 June and 14 July 2000, singles were at Amarales and La Vigía, respectively (RJG). In September–October 2003, CRG observed ten adults at La Cunita and on 15 May 2004 YCS & CRG recorded an adult in the mangrove at Carboncillal. Recorded virtually throughout Colombia, but ours are the first confirmed observations for the Pacific coast and a 245 km northerly range extension from the mangroves of the Ecuadorian coast, where it is common between Esmeraldas and El Oro.

WHITE IBIS *Eudocimus albus*
On 21 May 2004, we filmed a flock of 16 flying over Isla Pájaros. Despite the lack of previous records in the area, the species' presence was not unexpected given that it occurs on the eastern Pacific coast of Panama and the northern Ecuadorian coast (140 km to the south). In Colombia, it occurs on the Caribbean coast and east to the Andes, up to 500 m.

GREATER FLAMINGO *Phoenicopterus ruber*
The first confirmed record for the Colombian Pacific coast is of a bird video-taped at La Cunita on 31 July and 7 September 2003. However, National Park staff informed us of an individual at El Naranjo in 1998. These birds had probably escaped from captivity, given that the species is traded illegally in Colombia (Roda *et al.* 2003), whilst the nearest breeding population is on Galápagos. Nonetheless, the good plumage condition of the La Cunita bird might suggest a wild bird. Possibly the 1998 bird was a Chilean Flamingo *P. chilensis*, a species common on the Ecuadorian coast, but the La Cunita bird was clearly a Greater Flamingo based on size, bill shape and body coloration.

COLLARED FOREST FALCON *Micrastur semitorquatus*
A dead individual, found at El Cacao on 22 May 1999 (RJG), was preserved as a specimen (UV 6296). On the Pacific coast of Colombia it was known from as far south as the mouth of the río Munchique and in La Planada reserve in the Andes of Nariño (Salaman 1994), as well as in the Magdalena Valley and the northern Caribbean coast. In Ecuador it occurs throughout the Pacific lowlands. The first record in the coastal Chocó of Colombia and a 120 km southerly and 150 km westerly range extension.

GREY-NECKED WOOD RAIL *Aramides cajanea*
Frequently seen and heard in 2003 in mangroves within the park (CRG, RJG). Recorded throughout lowland Colombia, but on the Pacific coast known only from the Panamian border region to the Baudó mountains (300 km to the north. No records from the Ecuadorian Pacific coast.

AMERICAN GOLDEN PLOVER *Pluvialis dominica*
The first record in the Sanquianga area involved one in breeding plumage on 28 July 2000 (RJG). On 5 November 2003, CRG photographed two in winter plumage in La Vigía. Recorded on the Pacific coast of Colombia only at Buenaventura (170 km to the north), as well as from the Caribbean (Naranjo 1979, Estela & López-Victoria 2005), and at localities east to the Andes in north-west Meta, Tuparro National Park in eastern Vichada, and Leticia (Hilty & Brown 1986). No records from coastal Ecuador (Ridgely & Greenfield 2001), although Canevari *et al.* (2001) mentioned that it is an occasional visitor to both coasts of northern South America.

COLLARED PLOVER *Charadrius collaris*
Recorded in March–June 2004 at Mulatos (CRG). Known to be a permanent (breeding) resident at a variety of wetlands in the Cauca, Magdalena and Patía valleys, but also recorded as a migrant in the eastern Llanos and Amazonia (Canevari *et al.* 2001). Ours is the first confirmed record for the Pacific coast of northern South America.

AMERICAN OYSTERCATCHER *Haematopus palliatus*
On 12 June and 14 July 2000, one observed between Mulatos and Amarales (FAE, RJG, LFC). In 2003–04, small numbers were seen at La Cunita, where a nest with three eggs was found on 17 June 2004; the first confirmed breeding record for the Colombian Pacific. Recorded at few localities on both coasts (only Buenaventura in the Pacific, 170 km to the north) and found nesting in the Caribbean on the Guajira Peninsula (Díaz & Botero 1988). Its presence in Ecuador is presumed for the whole coast, but has been confirmed only in the Gulf of Guayaquil.

MARBLED GODWIT *Limosa fedoa*
In September–December 2003, one was photographed on the mudflats between El Cauchal and La Vigía (CRG, RJG). In Colombia, the only confirmed records are from two localities on the Caribbean coast (Naranjo 1979). Two old records from Ecuador, from Guayas and El Oro in the early 20th century.

UPLAND SANDPIPER *Bartramia longicauda*
One in the grasslands at El Cauchal on 17 October 2003 (CRG). Recorded at a number of wetlands in the interior of Colombia, and at two localities on the Caribbean coast. In Ecuador, it has been reported only from Andean and Amazonian localities.

SURFBIRD *Aphriza virgata*
One with Ruddy Turnstones *Arenaria interpres* at Mulatos on 12 September 2003 (Ruiz 2004). Other sight records are also from the Pacific coast, namely Isla Gorgona (Ortiz-von Halle 1990), Tumaco (Salaman 1995) and Bahía Solano (Kelsey 1999); the only specimen from Colombia was taken by LGN at Punta Soldado, Buenaventura Bay, in January 1993. Its presence has been suggested for the entire Ecuadorian coast, particularly north of Guayas.

WHITE-RUMPED SANDPIPER *Calidris fuscicollis*
In September–October 2003, several groups were observed on sandy beaches and in pastures between Mulatos and El Cauchal (CRG). In Colombia, known from a few localities on the Caribbean coast (Naranjo 1979) and in Amazonia; ours is the first record on the Pacific coast of northern South America. Identification was based on the all-white uppertail and the long wings extending beyond the tail.

BAIRD'S SANDPIPER *Calidris bairdii*
One in a pasture very close to the sandy beach of El Cauchal in October–November 2003 (Ruiz 2004). In Colombia, known from several localities on the Caribbean coast (Naranjo 1979, Estela & López-Victoria 2005), Puracé National Park, the Popayán plateau (Negret 1995) and upper Cauca Valley (LGN pers. obs.). The first record on the Pacific coast of northern South America. Like *C. fuscicollis* the wingtips extend beyond the tail, but *C. bairdii* differs in having a dark centre to the rump.

DUNLIN *Calidris alpina*
On 19–25 September 2003, one was on a tidal flat at El Cauchal, feeding with Short-billed Dowitchers *Limnodromus griseus* and Sanderlings *Calidris alba* (CRG). Separared from other *Calidris* by its larger size and rather long, droop-tipped bill. Several recent observations in coastal Ecuador, but this is only the second record for Colombia after that by Salaman (1995) at Isla Bocagrande, near Tumaco, in September 1994.

STILT SANDPIPER *Calidris himantopus*
Two at La Cunita on 30 September 2003 (RJG, CEH). Previous Colombian records include one locality in the Caribbean, one on the northern Pacific coast (500 km to the north) and the río Arauca, east of the Andes. Two localities in Ecuador: east of Guayas and Ecuasal ponds.

BUFF-BREASTED SANDPIPER *Tryngites subruficollis*
Three roosting on a mudflat at El Cauchal on 25 September 2003, and an immature trapped and photographed at La Cunita on 15 October 2003 (CRG, RJG, CEH). Previous Colombian records are from three localities on the Caribbean coast, the Andes of Popayán (Negret 1995), and the eastern Llanos in dpto. Meta; in Ecuador, it has been recorded only at Andean and Amazonian localities.

HERRING GULL *Larus argentatus*
On 22 May 2004, we found a first-summer at La Cunita; the bird was incapable of flight and was collected (ICN 35426). Only occasional in north-west South America, being extremely rare in Ecuador, with only a few sight records for Colombia, at three localities on the Caribbean coast (Naranjo 1979) and two in the Pacific (Buenaventura and Málaga Bay; Naranjo & Franke-Ante 1995).

BLACK SKIMMER *Rynchops niger*
One on a mudflat at La Vigía on 14 May 2004 (CRG, YCS). Recorded regularly in Colombia on the Caribbean coast, in the Cauca and Magdalena valleys, and east to the Andes in the Orinoco basin and Amazonia. On the Pacific coast recorded only from Málaga Bay (180 km to the north), by LGN.

PALLID DOVE *Leptotila pallida*
Regularly recorded (July 1999–June 2004) between Mulatos and La Vigía, at El Cacao. Known from the west slope of the Andes below 700 m, from the río San Juan south to Nariño, and the Pacific lowlands of Ecuador.

YELLOW-BILLED CUCKO *Coccyzus americanus*
A single near Carboncillal on 26 February 1999 (RJG). In Colombia known mostly from the Andes, but also recorded from the piedmont of the Orinoco, Amazonia and the northern Pacific coast; no records from the Pacific lowlands of Ecuador. Our record represents a 400 km southerly range extension.

VIOLET-BELLIED HUMMINGBIRD *Damophila julie*
On 14 July 2000 a single was mist-netted at Amarales (RJG), and another was observed on 14 December 2003 at Mulatos (CRG, CEH). Common throughout the Caribbean lowlands of Colombia and the Magdalena Valley, with a few records from the northern Chocó. In Ecuador it is widespread throughout the Pacific lowlands. Our records represent a 400 km southerly and 150 km northerly range extension along the northern South American Pacific coast.

WHITE-VENTED PLUMELETEER *Chalybura buffoni*
The first record for the southern lowlands of the Colombian Pacific comes from the mangroves of Sanquianga National Park on 15 July 2000 (RJG). Known in the Chocó region from the Urabá Gulf south to the Anchicayá Valley (150 km to the north-east) in Colombia, and from south of Guayaquil in Ecuador (630 km south).

GOLDEN-OLIVE WOODPECKER *Piculus rubiginosus*
The first record for the Chocó lowlands of Colombia involved one at the edge of a mangrove at El Naranjo on 14 July 2000 (RJG). Widespread and common throughout the Colombian Andes above 900 m, and in Ecuador occurs throughout the Pacific lowlands.

CRIMSON-CRESTED WOODPECKER *Campephilus melanoleucos*
Observed regularly in 1999–2003 in mature mangroves with tall trees. Found throughout most of Colombia, except the south-west, in dptos. Cauca and Nariño. No records from the Pacific lowlands of Ecuador.

DOUBLE-BANDED GREYTAIL *Xenerpestes minlosi*
On 4 May 1999, this species was found at Carboncillal (RJG), extending its range in the Colombian Chocó from the headwaters of the río San Juan in dptos. Chocó and Valle del Cauca (180 km to the north). Records in western Ecuador (240 km to the south) come from Pichincha and Imbabura provinces, at 400–500 m.

SHORT-TAILED FIELD TYRANT *Muscigralla brevicauda*
On 7 June 2000, one was mist-netted in *Uniola pittieri* grassland at El Naranjo (FAE, RJG). This flycatcher's range extends from the xeric habitats of Esmeraldas, in Ecuador, to northern Chile. The only previous record for Colombia was from Isla Gorgona (Ortiz-von Halle 1990), making ours the second Colombian and first mainland record.

EASTERN KINGBIRD *Tyrannus tyrannus*
An adult male was mist-netted on 26 March 2004 at Mulatos by YCS and CRG. Found throughout most of Colombia, but ours is the first record from the Pacific lowlands. In Ecuador, recorded from the foothills of the Pichincha at *c*.500 m.

BROWN-CHESTED MARTIN *Progne tapera*
Groups of 2–8 were frequently seen on coasts in April–May 2000 and 2003. Known to occur on the Pacific coast from southern Ecuador to northern Peru, but in Colombia it had been previously recorded only on the Caribbean coast, in the Magdalena Valley and east of the Andes.

TROPICAL MOCKINGBIRD *Mimus gilvus*
Frequently seen at Mulatos and El Naranjo in 2003–04, though we never found more than two at a given locality. On 13 April 2004, we found a nest with three eggs, in the stump of a dead palm at Mulatos. Widespread in Colombia, on the Caribbean coast, in the Andes and in the eastern Llanos. In Ecuador it occurs in the highlands of Imbabura and western Napo, at 1,900–2,600 m.

PROTHONOTARY WARBLER *Protonotaria citrea*
The only published record for the Colombian Pacific is from Nuquí. Recorded in mangroves at Ensenada de Utría National Park, in the bays of Cupica and Jurubidá in February–March and November–December 1996 (LFC), and in mangrove at El Naranjo on 20 March 2004 (CRG). Two records for the Pacific coast of Ecuador, in Esmeraldas. Our records suggest it occurs at very low densities on the Colombian Pacific coast.

Concluding remarks

Sanquianga National Park is an important stopover for several migrant shorebirds (Naranjo *et al.* 2006), and its strategic location led to its recent designation as an Important Bird Area (Franco-Maya & Bravo 2005). However, the area's importance goes beyond the provision of a safe haven for shorebirds, as its vast mangrove forests harbour populations of several Chocó endemics, e.g. White-whiskered Hermit *Phaethornis yaruqui*, Pallid Dove, Rose-faced Parrot *Gypopsitta pulcra*, Double-banded Greytail, Black-tipped Cotinga *Carpodectes hopkei* and Flame-rumped Tanager *Ramphocelus flammigerus*, nationally threatened species such as Cinnamon Teal, Brown Wood Rail *Aramides wolfi* and Guayaquil Woodpecker *Campephilus gayaquilensis* (Renjifo *et al.* 2002), and the globally threatened Buff-breasted Sandpiper (BirdLife International 2000).

Although our observations were restricted to the coastal habitats of Sanquianga, the existence of vast inland forests in the protected area suggests that it could also contain healthy populations of other endemic and/or threatened species, including Rufous-headed Chachalaca *Ortalis erythroptera*, Orange-fronted Barbet *Capito squamatus*, Spot-crowned Barbet *Capito quinticolor*, Chocó Woodpecker *Veniliornis chocoensis*, Rufous-crowned Antpitta *Pittasoma rufopileatum* and Ochraceous Attila *Attila torridus*. Unfortunately, these are threatened by extremely high deforestation rates (Etter *et al.* 2006).

Habitat disturbance probably explains the geographic expansion of several species from higher elevations in the western Andes or from xeric habitats of coastal Ecuador (Ortiz-von Halle 1990), such as Cattle Egret *Bubulcus ibis* and Tropical Mockingbird. Other apparent range extensions, e.g. that of Short-tailed Field Tyrant, might reflect seasonal movements from the arid zone of coastal Ecuador, as already suggested by Chapman (1927) and Ortiz-von Halle (1990). Recently, other species of similar credentials have been recorded in coastal Nariño, for instance Peruvian Meadowlark *Sturnella bellicosa* (Johnston *et al.* 2006). Most of the new records presented here amply illustrate the limited knowledge of the birds in coastal areas of Colombia, especially mangrove, which are often dismissed as being relatively poor habitats for birds (Naranjo 1997), but as demonstrated by recent studies on the Caribbean coast (Estela & López-Victoria 2005) represent critical habitat for many resident and migrant species (Naranjo *et al.* 2006). Further ornithological work to better document the diversity and distribution of coastal and lowland species in the Pacific is required.

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Ornithological notes from southern Bolivia

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The avifauna of the southern Bolivian departments of Chuquisaca and Tarija is relatively poorly known (Fjeldså & Mayer 1996), a fact reflected in the huge increase in the number of species listed for these geopolitical units between the 1980s (Remsen & Traylor 1989) and 2003 (Hennessey *et al.* 2003). Very few sites have been adequately surveyed, suggesting that much remains to be discovered about the ornithology of this region.

During visits in 2003–06 to these departments, as well as to neighbouring southern dpto. Santa Cruz, we made several interesting observations, including the first documented Bolivian records of Coscoroba Swan *Coscoroba coscoroba* and the nominate race of Silvery Grebe *Podiceps occipitalis*, details of which are presented here. We also report the second and third documented records of Black-headed Duck *Heteronetta atricapilla*, and three new species for dpto. Chuquisaca, all from the Montes Chapeados region. Lastly, we gathered data that help to clarify the status of Quebracho Crested-tinamou *Eudromia formosa*, a scarce *Chaco* endemic (Short 1975).

We present identifiable field photographs in support of three of these sightings. Taxonomy and nomenclature follow Remsen *et al.* (2007).

Survey sites

The following is a numbered list of Bolivian locality names mentioned herein and mapped in Fig. 1. Coordinates were taken using a Garmin GPS 60, except where stated. Localities are listed from north to south.

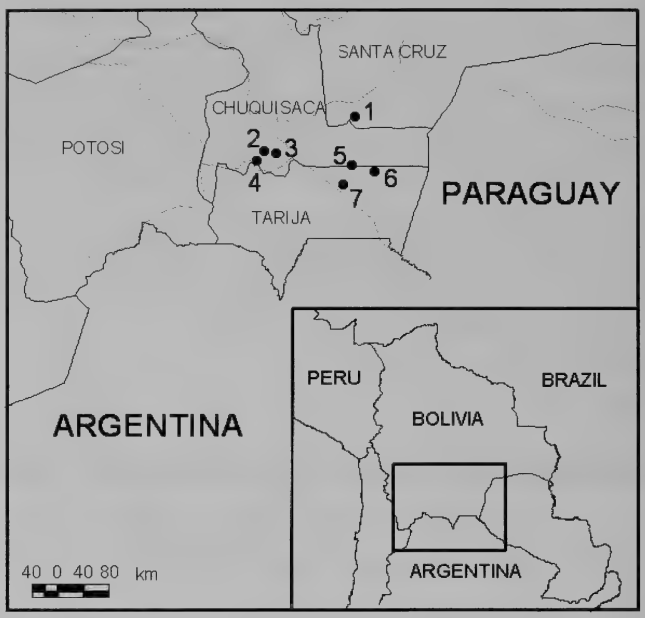

Figure 1. Map of relevant Bolivian departmental boundaries with survey sites, arranged from north to south and numbered as in the text.

(1) *Laguna Camatindi* (20°20'S, 63°17'W), *c.*600 m, Santa Cruz, 20–21 and 25 July 2006. A large lake near Boyuibe, surrounded by agricultural smallholdings and low *Chaco* scrub. Lake margins include extensive aquatic vegetation and flooded fields. Hunting is apparently prohibited and the wetland appears to be important for waterfowl, at least in the austral winter. It perhaps deserves classification as an Important Bird Area.

(2) *Cerro Campamentito* (20°48'S, 64°32'W: coordinates from S. Mayer *in litt.* 2005), Chuquisaca, 6 October 2003. This mountain, in the Montes Chapeados region of south-central Chuquisaca, supports large areas of humid forest up to 3,000 m. We surveyed the trail between El Palmar and Puca Pampa. A more detailed description of habitat was published in Fjeldså & Mayer (1996).

(3) *Cerro Bufete* (20°49'S, 64°22'W: coordinates from Schulenberg & Awbrey 1997), 2,000 m, Chuquisaca, 4 October 2003. Located above the village of El Palmar (1,000 m), this mountain is cloaked in humid forest between *c.*1,300 and 1,950 m. Detailed habitat descriptions were given by Fjeldså & Mayer (1996) and Schulenberg & Awbrey (1997).

(4) *Caraparí* (*c.*20°56'S, 64°39'W), *c.*1,000 m, Chuquisaca, 9 October 2003. This small town stands beside the río Pilaya in the semi-arid Valles region. Above it, steep slopes are partially covered with habitat resembling *Chaco* forest in structure,

Figure 2. Coscoroba Swan *Coscoroba coscoroba*, laguna Capirenda, near Boyuibe, dpto. Santa Cruz, July 2005; the first documented record for Bolivia (J. A. Tobias)

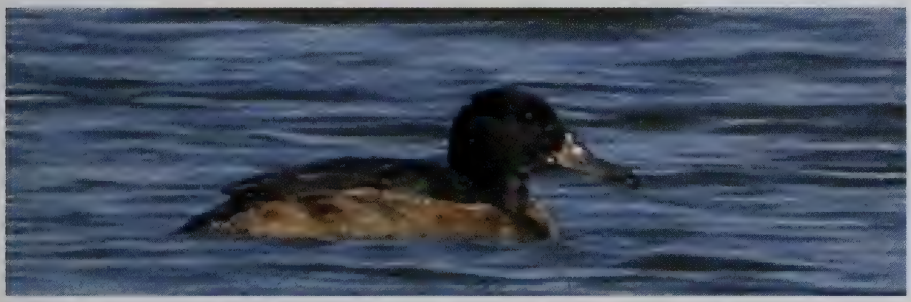

Figure 3. Black-headed Duck *Heteronetta atricapilla*, laguna Capirenda, near Boyuibe, dpto. Santa Cruz, July 2005; the first documented record for Bolivia in 90 years (J. A. Tobias)

Figure 4. Silvery Grebe *Podiceps occipitalis occipitalis*, laguna Capirenda, near Boyuibe, dpto. Santa Cruz, July 2005; first documented record for Bolivia (J. A. Tobias)

characterised by low-stature deciduous trees, terrestrial bromeliads and columnar cacti (including *Trichocereus* sp.). This habitat extends to *c.*2,000 m, above which grassy slopes rise to over 3,000 m.

(5) *San Ramon* (21°00'S, 63°19'W), 450 m, Chuquisaca/Tarija, 18–19 July 2006. A village just east of the paved Santa Cruz–Villa Montes road surrounded by agricultural clearings and moist forest (canopy 20 m).

(6) *Capirenda* (21°05'S, 63°01'W), 400 m, Tarija, 19–20 July 2006. Coordinates taken from a small rush-fringed pool in low *Chaco* woodland, close to a little-used

unpaved road, *c.*2 km from Capirenda village. A larger lake is situated in the village, but this is more disturbed and much less attractive to wildfowl (many coots *Fulica*).

(7) *Villa Montes* (21°16'S, 63°27'W), 400 m, Tarija, 18 July 2006. A small town near the base of the Andes surrounded by tall moist woodland, similar to that around San Ramon.

Species accounts

QUEBRACHO CRESTED-TINAMOU *Eudromia formosa*

A record from 15 km north-east of Capirenda, dpto. Tarija, in August 1957 (Banks 1977; specimen in Los Angeles County Museum), was subsequently regarded as provisional because the only individual collected was a chick, and therefore indistinguishable from Elegant Crested-tinamou *E. elegans* (Remsen & Traylor 1983). This uncertainty led Hennessey *et al.* (2003) to list both species as hypothetical in Bolivia.

We visited Capirenda for two days in 2006 but failed to encounter any *Eudromia* tinamous. According to reports of three local hunters, a large, crested tinamou occurs east of the village, towards the Paraguay border. It is said to be rare, and far outnumbered by two smaller species (presumably Brushland Tinamou *Nothoprocta cinerascens* and Tataupa Tinamou *Crypturellus tataupa*, both of which we encountered). The habitat throughout was dry Chaco woodland at 400 m with a 2–6 m canopy and grassy clearings. The only *Eudromia* liable to occur in such habitat is *E. formosa*, which inhabits similar vegetation in neighbouring Argentina, and Paraguay (M. Pearman *in litt.* 2006, P. Smith *in litt.* 2006). Habitat at Capirenda recalls that near Joaquín V. Gonzáles, prov. Salta (pers. obs.), a well-known locality for *E. formosa*. Moreover, recent sightings of the species in Paraguay are from within 65 km of the Bolivian border, and *c.*120 km from Capirenda. The favoured habitat of *E. elegans* is open or low-stature vegetation (usually 0.3–1.0 m in height), such as Patagonian scrub and *monte* scrub-desert, and it does not occur in *Chaco* woodland (M. Pearman *in litt.* 2006; *contra* Short 1975). The species has not been recorded north the Calchaquies Valley, a dry intermontane valley (>1,000 m) in west-central prov. Salta, Argentina, and is almost certainly absent from Bolivia due to the absence of suitable habitat: the valley rises to a 5,000 m pass, above which *puna* habitat extends to the Bolivia border (M. Pearman *in litt.* 2006).

COSCOROBA SWAN *Coscoroba coscoroba*

A pair of adults at laguna Camatindi on 20–21 and 25 July 2006 is the first documented record for Bolivia, and for dpto. Santa Cruz. The species was listed as 'Hypothetical' in Bolivia by Hennessey *et al.* (2003), on the basis of sightings in Paraguay at laguna Palmar de las Islas, in Parque Nacional del Gran Chaco, dpto. Santa Cruz, post-2000 (S. K. Herzog *in litt.* 2006). This lake has a Bolivian shore, and the species probably ventured within Bolivian borders, although this was never

confirmed. A report in 2005 from the Bolivian Chaco (M. Herrera *in litt.* 2006) is unconfirmed.

This conspicuous waterbird is common in the Alto Chaco region of Paraguay in the austral winter (Guyra Paraguay 2004), and fairly common even as far north as south-central prov. Jujuy in neighbouring Argentina (M. Pearman *in litt.* 2006). It is probably a regular visitor in small numbers to wetlands in the Bolivian Chaco.

BLACK-HEADED DUCK *Heteronetta atricapilla*

An adult male was photographed at Capirenda, dpto. Tarija on 19 July 2006. It was seen alongside other waterfowl, including White-faced Whistling-duck *Dendrocygna viduata* (12), Muscovy Duck *Cairina moschata* (1), Comb Duck *Sarkidiornis melanotos* (1), Ringed Teal *Callonetta leucophrys* (*c.*30), Brazilian Teal *Amazonetta brasiliensis* (*c.*15), White-cheeked Pintail *Anas bahamensis* (11), Rosy-billed Pochard *Netta peposaca* (22), Masked Duck *Oxyura dominica* (4) and Pied-billed Grebe *Podilymbus podiceps* (5).

In the same month a group of four (apparently two pairs of adults) was photographed on three dates at laguna Camatindi, with large numbers of waterfowl, including Comb Duck (2), Ringed Teal (*c.*200), Brazilian Teal (*c.*10), White-cheeked Pintail (*c.*200), Rosy-billed Pochard (*c.*50), Least Grebe *Tachybaptus dominicus* (*c.*20), Pied-billed Grebe (*c.*25), White-tufted Grebe *Rollandia rolland* (6), as well as White-winged Coot *Fulica leucoptera* (*c.*500) and White-faced Ibis *Plegadis chihi* (*c.*100). At both localities, Black-headed Ducks were typically sluggish and inconspicuous, usually loafing at the edge of floating aquatic vegetation.

These are the second and third documented records for Bolivia, and the first for 90 years. They include the first record for dpto. Tarija, and the second for dpto. Santa Cruz. The first Bolivian record was a female collected by J. Steinbach at Buena Vista in May 1916 (Meyer de Schauensee 1966; specimen in Carnegie Museum). A recent undocumented record involves unspecified numbers at laguna Taputarenda, dpto. Santa Cruz, in February 2005 (Maillard *et al.* 2006). These records suggest that the species is a regular visitor to Bolivia, probably as an austral migrant. In neighbouring Paraguay, it is a scarce austral winter visitor to the *Chaco* regions of Alto Chaco and Bajo Chaco (Guyra Paraguay 2004), whereas in Argentina it is locally common year-round in southern prov. Salta, moving north in the non-breeding season to prov. Santiago del Estero; there is also a specimen record from prov. Chaco, curiously from the austral summer (M. Pearman *in litt.* 2006).

SILVERY GREBE *Podiceps occipitalis*

At least two of the southern form *occipitalis* were photographed at laguna Camatindi in July 2006. One had retained breeding plumage. The nearest known breeding grounds are in prov. Santa Fe, Argentina (M. Pearman *in litt.* 2006), and it seems unlikely that breeding occurs in Bolivia.

The montane race *juninensis* is well known from Andean wetlands in Bolivia (Fjeldså & Krabbe 1990), but there are no confirmed records of *occipitalis*. The latter taxon has been listed as possibly occurring in Bolivia (Hennessey *et al.* 2003), on the basis of a statement that it 'winters in N of range' (Llimona & del Hoyo 1992). It was also mapped as a winter visitor to the Pantanal of eastern Bolivia (Fjeldså & Krabbe 1990, Fjeldså 2004), but the lowest altitudinal record in Bolivia is 2,600 m (Hennessey *et al.* 2003), suggesting an error and that *occipitalis*—the form most likely to occur in the lowlands—has never been reported from the country. Interestingly, an immature of the Andean form *juninensis* was also present at laguna Camatindi in July 2006 (photographed), thereby extending the lower altitudinal range of this form to 600 m.

In Argentina, nominate *occipitalis* migrates north in the austral winter, occurring in large numbers in prov. Santiago del Estero, but only infrequently further north, in prov. Formosa and prov. Chaco (M. Pearman *in litt.* 2006). It is scarce in Paraguay, being known only from Alto Paraná in the far south (Guyra Paraguay 2004). In Chile it has been reported more than once at Chungara, Lauca National Park, a few km from the Bolivian border (A. Jaramillo *in litt.* 2006), suggesting that it occurs more regularly in the highlands of Bolivia, and perhaps in southernmost Peru.

Nominate *occipitalis* and *juninensis* differ in several important features, including face pattern, voice, habitat, migratory tendency and moult strategy (Fjeldså & Krabbe 1990, Jaramillo *et al.* 2003). These characters probably serve to maintain reproductive isolation as no intermediate individuals have been reported, despite apparent contact in their breeding ranges (M. Pearman *in litt.* 2006). The two forms warrant treatment as separate species (Jaramillo *et al.* 2003).

WHITE-RUMPED HAWK *Buteo leucorrhous*

Two pairs in flight at Cerro Campamentito on 6 October 2003, one either side of the main ridge, represented the first record for dpto. Chuquisaca. One pair was displaying and vocalising, suggesting that the species breeds in the vicinity. This record fills a small gap in the species' range and suggests a continuous distribution through Bolivian montane forests from Peru to Argentina.

OILBIRD *Steatornis caripensis*

One in flight over montane forest at a camp at *c.*1,900 m on Cerro Bufete, dpto. Chuquisaca, in October 2003. Although seen only for *c.*5 seconds, the bird was easily identified by its distinctive long-winged, almost gull-like, shape and odd guttural alarm-note with which we were familiar from breeding sites further north. The known range extends south to the mountains of Amboró National Park, dpto. Santa Cruz (Hennessey *et al.* 2003). As the record is extralimital, and lacks evidence, it should not be treated as proof of occurrence in dpto. Chuquisaca; further documentation is required.

CRESTED GALLITO *Rhinocrypta lanceolata*
One at 2,050 m on steep slopes above Caraparí, in October 2003. This record (documented with sound-recordings and photographs) is the first for dpto. Chuquisaca, and the highest-ever altitude on record. In Argentina, the nominate race is known from *Chaco* woodland and *monte* scrub to 1,800 m (Mazar Barnett & Pearman 2001, Krabbe & Schulenberg 2003), but the previous upper-elevational limit in Bolivia was just 600 m (Hennessey *et al.* 2003). This disparity led to the statement that *saturata*, supposedly restricted to Bolivia and west Paraguay, was distributed 'only in lowlands' (Krabbe & Schulenberg 2003). It was not possible to identify the Chuquisaca gallito to subspecies, but given the locality we assume that *saturata* is involved, and that this form has a much broader altitudinal range than previously known. It probably extends along semi-arid watersheds of the southern Valles region to the montane zone, principally along the ríos Pilaya and Pilcomayo.

WHITE-BROWED GROUND-TYRANT *Muscisaxicola albilora*
Four seen, and one photographed, along a 2-km transect through ridgetop *puna* above Caraparí, in October 2003. Most sightings were made at *c.*3,100 m. Although superficially similar to Puna Ground-tyrant *M. juninensis*, they were separable by their longer and more conspicuous white supercilia (extending well behind the eye), the slightly greyer upperparts, and the richer chestnut hindcrown. These records, the first for dpto. Chuquisaca, were to be expected given that this austral migrant ranges north to Ecuador in the non-breeding season (Meyer de Schauensee 1966).

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Birds of Damar Island, Banda Sea, Indonesia

by Colin R. Trainor

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Wallacea, in the extreme south-east corner of Asia, has an extraordinary avifauna. A staggering ten Endemic Bird Areas (EBAs) and 67 Important Bird Areas have been identified (Stattersfield *et al.* 1998, BirdLife International 2004); indeed the region's exceptional diversity has challenged identification of conservation priorities, including the ordering of on-ground baseline surveys. Field studies have intensified since the 1980s, with discoveries of new bird taxa, numerous rediscoveries, and new natural history data for poorly known species (e.g. Lambert 1998a,b, Rasmussen 1999, Riley & Wardill 2001, Rozendaal & Lambert 1999, Olsen *et al.* 2002, Indrawan & Somadikarta 2004, Sangster & Rozendaal 2004). Yet the sheer number of islands (*c.*13,500) and consequent idiosyncratic spatial distribution of their 260+ (taxonomy dependent) endemic species has, amongst other factors, slowed efforts to evaluate bird species status.

In south-east Wallacea, the Banda Sea Islands Endemic Bird Area (EBA 165) is dominated by ocean and numerous widely scattered islands. Seventeen of the 40 globally restricted-range birds are confined to this EBA, and most of the remainder occur in neighbouring EBAs (Stattersfield *et al.* 1998). Recent avifaunal surveys within EBA 165 have been undertaken only on the Tanimbar and Kai islands (Coates & Bishop 1997, Bishop & Brickle 1998, Jepson *et al.* 2001), though the area

has long been identified as a national conservation priority (FAO 1982, Sujatnika *et al.* 1995). Damar (07°08'S, 128°41'E; 198 km^2, max. altitude 868 m) is a remote volcanic island 380 km south-east of Ambon and 200 km north-east of Timor-Leste (East Timor), in the Maluku Tenggara Barat district of Maluku province, Indonesia; and is the only other island within the EBA known to host a single-island endemic.

The first Damar specimens involved three birds obtained by the Dutch civil servant Johann G. F. Riedel, as noted by Meyer (1884) and Hartert (1900), between August 1883 and June 1884 (van Steenis-Kruseman 1950). Twelve species were collected on Damar during 6–11 November 1891 by officers (P. W. Bassett-Smith and J. Walker) of the *HMS Penquin*, and a further 39 by Heinrich Kühn, during his two-month visit from *c.*30 October–30 December 1898 (Sharpe 1894, Hartert 1899, 1900; dates established from specimen labels, *per* N. J. Collar). Kühn was a professional collector in the employ of Lord Walter Rothschild (Rothschild 1983), as part of a complex network of collectors scattered throughout the world. A review of the bird fauna of the South-west islands by Finsch (1901) listed 52 species for Damar. During his time there, Kühn collected one species new to science, the endemic Damar Flycatcher *Ficedula henrici*. As far as is known, no ornithologist visited Damar during the 20th century (BirdLife International 2001). Chiefly because of its tiny global range and the century gap in information on its status, this flycatcher has been considered globally threatened (Stattersfield *et al.* 1998, BirdLife International 2004). For that reason, on-the-ground surveys were planned for 1998, to coincide with the 100th anniversary of the bird's discovery, but these

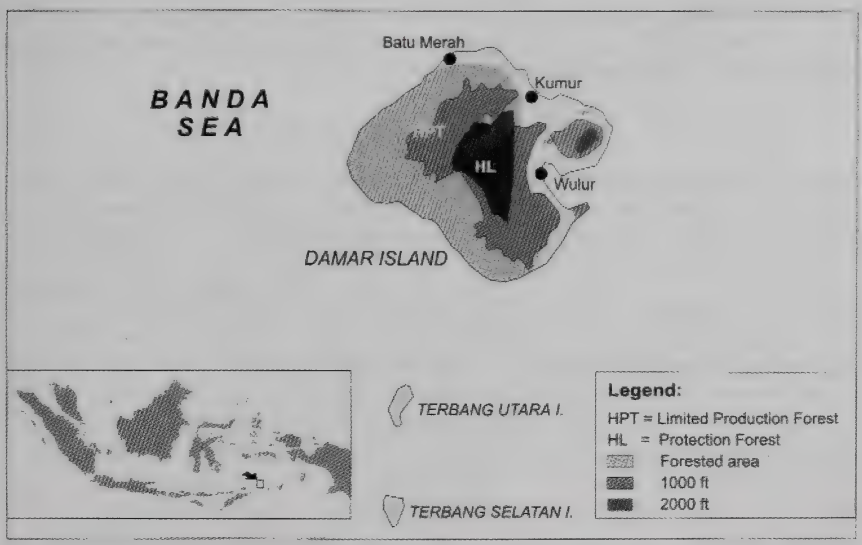


Figure 1. Map of Damar showing estimated forest cover, the main villages and the Terbang Islands.

were abandoned due to widespread communal violence in Maluku at the time (BirdLife International 2001; J. C. Eames pers comm. 2001, G. Dutson *in litt.* 2002). This paper reports on field work undertaken in August–September 2001. It describes the habitat range and conservation status of all birds on Damar and two small satellite islands. Popular accounts have been published elsewhere (BirdLife-IP 2001, Shannaz 2002, Trainor 2002a,b) and a sister paper (Trainor 2007) will examine bird community composition in relation to forest disturbance.

The island

Damar is mostly hilly (*c.*70% of land area is at 200–400 m a.s.l.), but only steeply sloping on Mount Wurlali volcano. No weather stations exist locally, but rainfall on nearby Romang Island averages 2,518 mm/year; coasts are dry and rainfall tends to increase with elevation (RePPProT 1989). Approximately 75% (*c.*150 km^2) of the island retains closed-canopy tropical forests (canopy closure >70%), including dry forest near the coast with many deciduous trees (to 12–20 m tall), grading into semi-evergreen and evergreen forest further inland (to 40 m tall), above *c.*60 m elevation. There are no protected areas, and forest status is protection forest or production forest (Fig. 1). Damar's human population was 4,745 in the year 2000 (Central Statistics Office, Wonreli Kisar), with seven villages of 303–1,056 citizens on the north-west, north and east coasts. The economy is subsistence, based on sale of agricultural cash crops: coconut *Cocos nucifera*, cloves *Eugenia aromatica* and nutmeg *Myristica fragrans*. Sago *Metroxylon sagu* is grown around springs in modified coastal lowlands, and locally in forest plots. Forest is used for conversion to smallholder agricultural plots, timber collection and moderately intensive hunting of pigs, Common Palm Civet *Paradoxurus hermaphroditus*, pigeons and Orange-footed Scrubfowl *Megapodius reinwardt*.

TABLE 1

Summary of study sites and survey effort; major sites in bold. Habitats: 1 = primary evergreen forest/semi-evergreen forest, 2 = primary tropical dry forest, 3 = modified mangrove forest, vegetable gardens, sago and/or plantations.

Sites	Dates	Habitat	Field survey hrs
Batumerah forest (0–120 m)	27–31 August	1,2	24
Batumerah, Awehnyo coast (0–40 m)	27–31 August	3	4
Kumur forest / Ayerkota Valley (0–340 m)	1–3 September	1,3	18
Bebar Timur (0–200 m)	25 August	2,3	4
Wulur forest (10–440 m)	18 August	1,3	48
Wulur, 3 km south-east (0–80 m)	14 August–11 September	1,3	20
Terbang Utara (0–60 m)	8–9 September	2	6
Terbang Selatan (0–60 m)	8 September	2	6
			Total 130

TABLE 2
Global distribution of 'key' bird species recorded on Damar.

Species	Worldwide range
Orange-footed Scrubfowl *Megapodius reinwardt*	Wallacea, Nusa Penida, Kangean, Aru, New Guinea, Australia
Beach Thick-knee *Esacus neglectus*	Australasia and SE Asia
Metallic Pigeon *Columba vitiensis*	Insular SE Asia, Papua, Melanesia, Polynesia
Barred-necked Cuckoo-Dove *Macropygia magna*	S Sulawesi islands and E Lesser Sundas
Blue-tailed Imperial Pigeon *Ducula concinna*	Small islands in Wallacea, Aru, W New Guinea
Pink-headed Imperial Pigeon *Ducula rosacea*	Java Sea islands, Wallacea
Black-backed Fruit Dove *Ptilinopus cinctus*	Lesser Sundas, Bali
Rose-crowned Fruit Dove *Ptilinopus regina*	SE Maluku, Lesser Sundas, Aru, Australia and New Guinea
Blue-streaked Lory *Eos reticulata*	Tanimbar, Kai, and Babar
Olive-headed Lorikeet *Trichoglossus euteles*	E Lesser Sundas
Little Bronze Cuckoo *Chrysococcyx minutillus*	SE Asia, Australasia
Cinnamon-collared Kingfisher *Todiramphus australasia*	Lesser Sundas (except Sumbawa/Alor)
Elegant Pitta *Pitta elegans*	Sangihe, Sula, Maluku, Lesser Sundas, Flores Sea islands, Nusa Penida
Orange-banded Thrush *Zoothera peronii*	E Lesser Sundas
Damar Flycatcher *Ficedula henrici*	Damar
Rufous-sided Gerygone *Gerygone dorsalis*	Islands in Flores Sea, SE Maluku and E Lesser Sundas
Spectacled Monarch *Monarcha trivirgatus*	Maluku, Lesser Sundas, Australia, New Guinea
Golden Whistler *Pachycephala pectoralis*	Australasia, Wallacea, Bali, E Java
White-bellied Whistler *Pachycephala leucogastra*	SE Wallacea
Scaly-breasted Honeyeater *Lichmera squamata*	SE Maluku and E Lesser Sundas
Red-chested Flowerpecker *Dicaeum maugei*	S Sulawesi islands, Lesser Sundas

Study sites and methods

Surveys were undertaken over 30 days (14 August–12 September) at three major forest sites on Damar (Batumerah, Kumur and Wulur [Batoe Merah and Woeloer of Hartert 1900]) and five minor sites, including two offshore islets: Terbang Utara (07°18'S, 128°33'E; 6 km^2) and Terbang Selatan (07°22'S, 128°33'E; 5 km^2) (Fig. 1, Table 1). Wulur village in the east of the main island was used as a main base, with forest accessed in the north-west and centre-north of the island via the coastal villages of Batumerah and Kumur. I camped at each of the three main sites for 2–5 nights (*c.*2–4 km from populated centres), on Terbang Utara for one night, and otherwise made daytime visits from village bases to minor sites.

At Batumerah and Wulur two mist-nets (9 m long × 4 m high) were operated for five and six days respectively. Captured birds were identified, measured (Damar Flycatcher and Orange-sided Thrush *Zoothera peronii*) and photographed. At these two sites, and Kumur, systematic point counts were used to survey bird community composition in primary forest and secondary habitat, but this information will be

presented elsewhere. General observations, over 2–3 km^2 at each site, included noting species by habitat and elevation, with additional information on number of individuals, sex, perch height and behaviour noted for 'key' birds (see Table 2). Elevation was measured using an altimeter, and geographic coordinates were extrapolated from the Google earth programme. Playback was used *ad hoc* at Batumerah and Wulur to elicit responses from Rainbow Pitta *Pitta elegans*, Cinnamon-banded Kingfisher *Todiramphus australasia*, Damar Flycatcher (using Little Pied *Ficedula westermanni* and Sumba Flycatchers *F. harterti*) and *Ninox* owls (using Southern Boobook *Ninox novaeseelandiae* from Timor). Calls of Shining Flycatcher *Myiagra alecto* were used to elicit responses from monarch flycatchers. Vocalisations were tape-recorded using a Sony Professional recorder TCM-5000EV with a Sennheiser ME-66 directional microphone, and analysed by Richard Ranft at the British Library Sound Archive, London, UK, using the Avisoft-SASLab Pro programme.

Records of interest

Thirteen of the 38 resident birds listed for Damar by 19th century collectors are globally restricted-range species, and most of them are forest dependent. Two others, Rufous-sided Gerygone *Gerygone dorsalis kuehni* and Golden Whistler *Pachycephala pectoralis dammeriana*, are represented on Damar by endemic subspecies. The following annotated list focuses on the habitat range and conservation status of the threatened, Near Threatened (NT), restricted-range (RR, global range >50,000 km^2) and forest-dependent species identified (the 'key' birds, see Table 2). I recorded 54 species (22 forest-dependent) on Damar and the Terbang Islands: 48 on Damar, and 34 on the Terbang Islands (25 on Terbang Utara and 28 on Terbang Selatan). This total excludes the unconfirmed record of Brush Cuckoo *Cacomantis variolosus* and a species of rail on Damar. All records are new for the Terbang Islands. I also provide details of the five species not previously recorded in the Damar group, and the 15 new island records from Damar itself. A complete list of the 73 species recorded from Damar and the Terbang islands both historically and recently appears as an Appendix. Where quoted, global threat status follows BirdLife International (2004).

ORANGE-FOOTED SCRUBFOWL *Megapodius reinwardt*
Usually observed as pairs or singles on Damar (0–440 m) but abundant on Terbang Selatan with *c.*5 records per hour. Present in forest and coastal vegetation except around Wulur where it is hunted intensively. Active nest mounds were found at Batumerah, Kumur and Terbang Selatan. 'Common on Dammer Island' (Hartert 1900).

RAIL SP.
A dark brown rail was observed briefly as it entered dense shrub near mangroves at Wulur on 16 August. Red-necked Crake *Rallina tricolor* and White-breasted

Waterhen *Amaurornis phoenicurus* were collected by Kühn (Hartert 1900), with the former species the most likely of these two (amongst other) possibilities, based on coloration. Red-necked Crake is widespread in the Papua region, and north-east Australia, but Damar lies at the western extremity of the range (Coates & Bishop 1997).

BEACH THICK-KNEE *Esacus neglectus* (NT)
Common on Terbang Selatan: one foraged on barnacles and other molluscs on an exposed rocky shelf and, subsequently, a further three arrived in the same area to feed. A pair was later observed on another beach. On Terbang Utara there were records of two singles indicating the abundance of this typically low-density beach-specialist on the islands. Not recorded on Damar and absent there according to local men.

METALLIC PIGEON *Columba vitiensis*
This inconspicuous forest pigeon was recorded five times in primary evergreen forest (60–340 m) suggesting that it is relatively common. At Wulur a hunter shot one on 19 August and stated that he had only once previously obtained the species (Y. Lutruwowan pers. comm.). Measurements and bare parts: total length 415 mm, tail 155 mm, wing 242 mm, culmen 25 mm, tarsus 30 mm, orbital ring crimson, cere and base of bill crimson, iris orange, bill pale yellow to white. Subsequently, a second was shot in the same area (S. Romode pers. comm.). At Batumerah one was observed for two minutes in primary forest perched at 12 m, above a stream, apparently preparing to drink. Hartert (1900) wrote that it was 'found frequently in November and December'.

BARRED-NECKED CUCKOO-DOVE *Macropygia magna* (RR)
Apparently local and uncommon on Damar where found twice in degraded beach forest and coconut plantation (5–60 m) at Batumerah, the first island records. One was observed for two minutes perched at 14 m in degraded beach forest on 31 August. The two-note *avoot-voo* calls heard on Damar are probably indistinguishable from the *koowuck-whuuuu* transcribed for race *timorlaoensis* on Yamdena (Tanimbar) (Coates & Bishop 1997) and Alor (Trainor 2005a). In comparison, subspecies *magna* of Timor and Wetar has a three-note call (Coates & Bishop 1997), and occurs on Romang (adjacent to Damar) although its call there is unknown.

BLUE-TAILED IMPERIAL PIGEON *Ducula concinna* (RR)
Abundant in forest throughout Damar, common on Terbang Selatan but unrecorded on Terbang Utara; its powerful *urrauw* was a near-constant background sound. Observed feeding in nutmeg (one shot had a nutmeg fruit in its oesophagus) and local people stated that the species consumes fruit of *Canarium* sp., *Gnetum gnemon*, *Barringtonia asiatica*, *Paraserianthes falcataria*, *Eusideroxylon zwageri*, *Toona sureni* and *Ficus* spp. It was intensely hunted with air-rifles and generally

absent from second growth near villages. On 19–20 August, two nests were observed at 25 m and 30 m above ground in primary evergreen forest at Wulur (360 m); one bird was observed carrying a large stick at Batumerah camp (31 August 2001) and another with nesting material at Kumur (3 September 2001). 'One male and two females were shot' (Hartert 1900).

PINK-HEADED IMPERIAL PIGEON *Ducula rosacea* (NT, RR)
Uncommon to locally absent in primary semi-evergreen forest (possibly outcompeted by Blue-tailed Imperial Pigeon?), but common in modified lowlands and tropical dry forest (0–340 m), and abundant in tropical dry forest on Terbang Utara.

BLACK-BACKED FRUIT DOVE *Ptilinopus cinctus*
Strongly associated with primary evergreen and tropical dry forest, where common to abundant on Damar and both Terbang islands. It apparently suffers less hunting pressure than Blue-tailed Imperial Pigeon because of its smaller size and less conspicuous habits. Birds were observed eating figs on Terbang Selatan. Hartert (1900) noted 'a fine series from Damer [*sic*]'.

ROSE-CROWNED FRUIT DOVE *Ptilinopus regina*
Very common on Damar, Terbang Utara and especially Terbang Selatan where strongly associated with primary evergreen and tropical dry forest, but visits fruit trees in all habitats. Hartert (1900) noted that they were 'not rare in different parts of the island, at Batoe Merah [Batumerah] and Wulur'.

BLUE-STREAKED LORY *Eos reticulata* (RR, NT)
This poorly known lory was uncommon, as singles, pairs and groups of up to six in tropical evergreen forest and forest edge. The only record away from forest was of a few feeding in a flowering coconut. Several fed with ten Olive-headed Lorikeet *Trichoglossus euteles* in a flowering *Syzygium* sp. near Batumerah. At Kumur there were ten records of 1–6 individuals (total 37, mean group 3.7), including six feeding on flowers in the canopy of a *Paraserianthes falcataria* tree. On Damar this species is seasonally trapped for the cagebird trade but none was known to have been captured during the study period. Ninety-seven were traded in Medan, Sumatra, in 1997–2001 (Shepherd *et al.* 2004). Blue-streaked Lory was probably introduced to Damar as a cagebird, as noted by Hartert (1901): 'In former numbers of *Novitates Zoologicae* I have stated that *Eos reticulata* was sent by Mr. Kühn from Toeal on Little Key, and from Dammer in the Banda Sea. Mr. Kühn now writes that it was apparently introduced to both Dammer and the Key group, and that the Tenimber Islands are its sole natural home.' Blue-streaked Lory is much more abundant in the Tanimbar Islands (Jepson *et al.* 2001) than on Damar, and has not been reported from the Kai Islands since the 1890s (Bishop & Brickle 1998). There is an unconfirmed sight record from Wetar (White & Bruce 1986) and reliable anecdotal

reports from Timor-Leste (CRT unpubl.), perhaps indicating regular inter-island flights (or cagebird escapees). Two adult males were shot by Kühn (Hartert 1900).

OLIVE-HEADED LORIKEET *Trichoglossus euteles* (RR)
Abundant, with several hundred observations in highly modified lowland habitats including coconut plantations, secondary forest and mangroves, but less common in primary semi-evergreen forest. Numerous observations of singles and pairs feeding in flowering coconut trees throughout the lowlands (notably at Ayerkota Valley near Kumur), and once on *Syzygium* flowers. Local men indicated that birds are trapped annually and sold for less than US$1 each (Y. Romadae & M. Surlialy pers. comm.), but no captives were observed in villages. Endemic to the Lesser Sundas and appears commoner on small islands such as Adonara (Trainor 2002), Atauro (Trainor & Soares 2004) and Lembata (Trainor 2003) than on large ones such as Timor (CRT unpubl.). A 'good series' was collected (Hartert 1900).

LITTLE BRONZE CUCKOO *Chrysococcyx minutillus*
Subspecies *rufomerus*, described in 1900 and distributed on the Banda Sea islands of Moa, Kisar, Leti, Sermata, Romang and Damar, had not been reported in the wild since *c.*1905. It was common in forest edge, villages, agricultural land and forest (0–400 m), where observed as singles, pairs and small groups of up to five, perching low on logs and branches and taking insects on the wing or gleaning from low bushes, including *Capsicum* sp. They also pounce on the ground to take insects from bare soil or litter, with one seen taking a caterpillar. *Chrysococcyx* parasitise the genus *Gerygone* throughout the latter's range (Brooker & Brooker 1989). On several occasions cuckoos were mobbed by their presumed local host Rufous-sided Fairy-warbler *Gerygone dorsalis* (and by Ashy-bellied White-eye *Zosterops citrinellus*). The call was an accelerating whistled trill of 3.2 seconds, ascending almost imperceptibly in pitch over the first half, then descending noticeably, and comprising 45 notes. Peak frequencies shifted from 3.2 kHz initially, to 3.2 kHz over the middle notes and 2.8 kHz terminally (Fig. 2a). The song comprised *c.*4–5 whistled *kiri* notes in a rhythmical series lasting 1.0–1.4 seconds, and ranging at

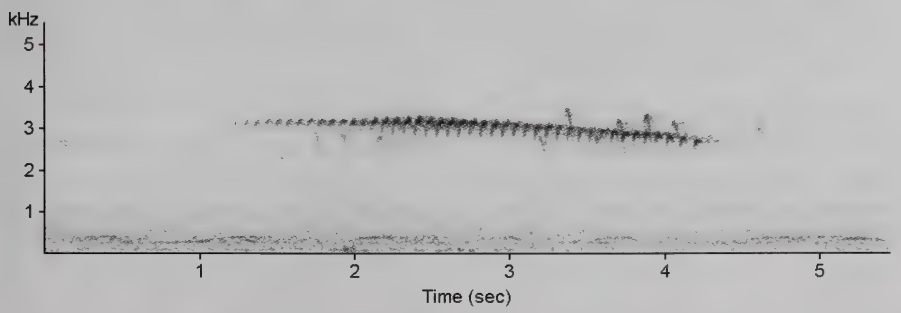
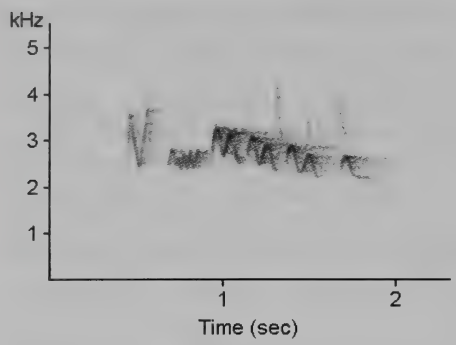


Figure 2a. Little Bronze Cuckoo *Chrysococcyx minutillus*, accelerating whistled trill.



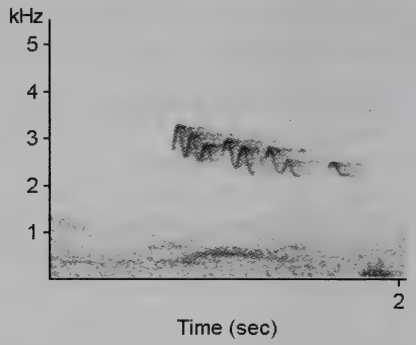


Figure 2b (left). Little Bronze Cuckoo *Chrysococcyx minutillus*, whistled song (example 1).
Figure 2c (right). Little Bronze Cuckoo *Chrysococcyx minutillus*, whistled song (example 2).

2.1–3.7 kHz (Figs. 2b, 2c). These vocalisations of *rufomerus* are similar to those of the species elsewhere (R. B. Payne *in litt.* 2006), as is its behaviour, supporting status as a subspecies of *minutillus* (Payne 2005).

CINNAMON-BANDED KINGFISHER *Todiramphus australasia* (RR, NT)
Probably common, but inconspicuous and calls irregularly. Recorded in a wide range of wooded habitats including evergreen and dry forest, forest edge and plantation (cashew and clove) from sea level to 440 m. There were few observations within forest (one at Wulur perched at 6 m), but forest-edge birds frequently duetted at dawn and dusk with a raucous *ch-whee*. Twice birds were observed perched on horizontal branches directly above streams (at 2 m), scanning for prey. On 2 September in primary evergreen forest at Kumur, I followed a loud, distinctive and persistent call which led me to an apparently recently fledged bird in the subcanopy. One foraged for invertebrates in leaf litter then flew to a perch at 5 m in a clove plantation. Kühn collected nine specimens (Hartert 1900).

ELEGANT PITTA *Pitta elegans*
This species called rarely and was observed just twice, in primary forest with a dense rattan understorey. At Wulur and Kumur pairs duetted at dusk, and one called from dry forest on Terbang Utara.

ORANGE-SIDED THRUSH *Zoothera peronii* (NT, RR)
At the time of the survey there had been no field observations of race *audacis* (East Timor, Wetar, Babar, Romang and Damar) since its description. Ecologically similar to race *peronii* (of Roti and West Timor), it proved to be common in evergreen and tropical dry forest, and frequent in secondary habitats, calling constantly from dawn to late morning and less so in the afternoon. They perched in the subcanopy at 8–16 m, or canopy, but were also observed on logs and the ground. At Kumur a recently fledged juvenile was observed low in shrubs in a banana plantation, and another

recent fledgling with white speckling on its breast was observed preparing to drink in a sago plantation (both 2 September). A bird shot in the wing near Wulur was intended as a pet, but died the following day (N. Rumihin pers. comm.). In West Timor, this bird is intensively captured for trade but there was no evidence of commercial trapping on Damar. Kühn collected at least ten specimens (LeCroy 2005).

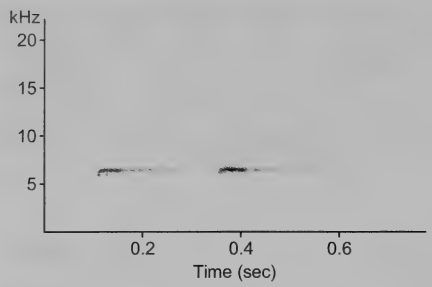
DAMAR FLYCATCHER *Ficedula henrici* (VU)

Dependent on primary forest (semi-evergreen forest >60–100 m and evergreen forest >100 m, but apparently not tropical dry forest), to at least 440 m, and despite using near-forest smallholder garden and sago groves, appears largely intolerant of forest modification. It was unrecorded from highly modified coastal habitats (beach forest, mangrove, coconut and clove plantations). There were 20 direct field observations of at least 17 individuals including four pairs, and a further 18 aural records made during point counts. A male was mist-netted at Wulur and a male and female captured at Batumerah (Table 3). Only males were heard calling and, presumably, all aural records were of males. Birds perched on the ground or in the understorey at a mean height of 98 cm (n=37, range 0–3 m), especially on rattan, lianas and saplings. In forest they searched for insects on bare ground, rocks, in leaf litter, bases of tree trunks and in adjacent shrubs and saplings, and they flew (n=12, mean distance 4 m, range 0.5–10 m) between low perches during foraging sallies. Females were observed only four times, each for less than two minutes; they were silent and inconspicuous. Males are paler slate-blue than portrayed in Coates & Bishop (1997), often with a less well-developed forehead and frontal band. The bill, at least of the male, is longer and thinner than depicted in Coates & Bishop (1997), and the white throat patch can be reduced or absent (immatures?). The upperparts of the trapped (possibly immature) female (see Trainor 2002a) are mainly pale brown and grey, with a rich buff belly and chest. A village elder at Kumur (in Damar-Batumerah language: Chlenova & Chlenov 2006) gave the local name of *Lwotu*

TABLE 3

Measurements (mm) for Damar Flycatcher *Ficedula henrici* and Orange-sided Thrush *Zoothera peronii* trapped in mist-nets, and a flycatcher measured by Hartert (1900). Other birds captured were: Orange-sided Thrush (one at Batumerah), Ashy-bellied White-eye *Zosterops citrinella* (six at Wulur, three at Batumerah), Golden Whistler *Pachycephala pectoralis* (three at Wulur), Spectacled Monarch *Monarcha trivirgatus* (two at Wulur), Northern Fantail *Rhipidura rufiventris* (one at Wulur) and Rufous Fantail *R. rufifrons* (one at Batumerah).

Species	Site and date	Total length	Wing	Tail	Culmen	Tarsus
Damar Flycatcher	(Hartert 1900)	*c.*130	68–69	50	15	20
Damar Flycatcher, male	Wulur, 20 August	125	65	45	11	-
Damar Flycatcher, male	Batumerah, 29 August	110	63	44	10	22
Damar Flycatcher, female	Batumerah, 29 August	108	62	47	-	24
Orange-sided Thrush	Wulur, 22 August	208	104	78	19	32



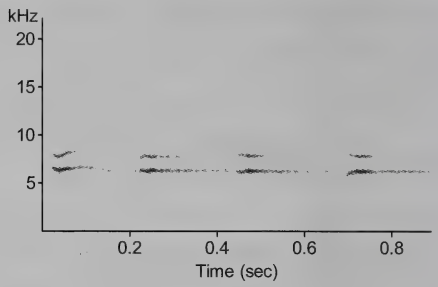


Figure 3a (left). Sonogram of Damar Flycatcher *Ficedula henrici*, two notes in 0.5 seconds.
Figure 3b (right). Sonogram of Damar Flycatcher *Ficedula henrici*, four notes in one second.

lwotu for Damar Flycatcher, but no other locals had a name for the bird and it is undoubtedly poorly known. Unsurprisingly, playback using calls of Little Pied and Sumba Flycatchers failed to illicit responses from Damar Flycatcher because their calls are not similar. The call is a thin, high-pitched, metallic, insect-like *seep*, given singly or often doubled, *seep-seep*, lasting 0.3 seconds (Fig. 2a), whilst the song comprises four very similar notes delivered over *c*.0.7 seconds, with *c*.2.6–4.3 seconds between bouts (Fig. 2b). Each note is *c*.0.05 seconds in duration with a frequency range of 6.2–6.5 kHz. The species' conservation status is evaluated in the Discussion.

RUFOUS-SIDED GERYGONE *Gerygone dorsalis* (RR)
Represented on Damar by the endemic race *kuehni*, it was common in mangrove, villages and other modified coastal habitats as well as in inland forests, including on the Terbang Islands. Observed feeding singly, in pairs and in small groups (often with Ashy-bellied White-eye *Zosterops citrinellus*) gleaning invertebrates (including grubs) from banana, papaya and cassava leaves and *Ficus* fruit. Its reported absence from large islands of the Kai archipelago (Coates & Bishop 1997) and lack of recent records from Kisar (Trainor 2003), where last reported in 1901, suggest there is much still to learn about its ecology. Under no threat of extinction on Damar.

SPECTACLED MONARCH *Monarcha trivirgatus*
The most frequently recorded understorey bird in primary evergreen forest and secondary forest, but absent from the Terbang Islands.

GOLDEN WHISTLER *Pachycephala pectoralis*
The endemic subspecies *dammeriana* was common in evergreen forest but much less so in secondary habitats, and absent from the Terbang Islands. Females were occasionally seen perched low in the understorey (0.1–3.0 m), on horizontal branches, and hopping thrush-like on the ground. Males were inconspicuous and

vocalised typically from the subcanopy at 4–12 m. At Batumerah a male gleaned an insect larva from a tree at 3 m then descended to a streambed to hit it on a rock.

WHITE-BELLIED WHISTLER *Pachycephala leucogastra* (RR)
This species was occasional in primary evergreen forest, but frequent in secondary habitats and especially mangrove—as on nearby Yamdena (Coates & Bishop 1997). Typically, both sexes were observed singly or in small groups of up to four, with almost all observations at ground level to 4 m. Females were often found low in dense grass beneath coconut palms. In contrast, Coates & Bishop (1997) state that White-bellied Whistlers 'frequent upper tree levels'. Subspecies *kebirensis* is endemic to Damar, Babar, Moa, Wedan and Romang, but the species' taxonomic relationships are unclear.

SCALY-BREASTED HONEYEATER *Lichmera squamata* (RR)
One of the most frequently encountered birds in secondary habitats and primary evergreen and tropical dry forest.

RED-CHESTED FLOWERPECKER *Dicaeum maugei* (RR)
Common in forest but less frequently recorded in disturbed coastal habitats. Several were observed feeding at mistletoe (Loranthaceae) flowers on a *Ficus* tree near Kumur. Kühn collected a male at Wulur (Hartert 1900).

New island records

***FREGATA* SP.**
Frigatebirds were frequently observed soaring above the coast, with singles and groups of up to 11 noted at Bebar Timur, Batumerah and Kumur. About 80 Lesser Frigatebirds *F. ariel* and at least two Great Frigatebirds *F. minor* were observed as part of a roost on Terbang Selatan (said sometimes to number thousands: E. Rumpeniak pers. comm.). Three Great Frigatebirds were present near Wulur on 14 August, and two Lesser Frigatebirds were noted at Kumur.

LITTLE BLACK CORMORANT *Phalacrocorax sulcirostris*
Uncommon on the coast, with two observations of singles: at an estuary near Batumerah on 30 August, and in flight near Kumur on 3 September. A locally common waterbird in the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

LITTLE PIED CORMORANT *Phalacrocorax melanoleucos*
Three were seen on the north coast of Terbang Selatan. Locally common in the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

STRIATED HERON *Butorides striata*
One in the rocky bed of the Awehnyo River on 29 August.

RUFOUS NIGHT HERON *Nycticorax caledonicus*
One observed at dawn, feeding in a stream near Air Panas on 15 August. Initially identified as a Black-crowned Night Heron *N. nycticorax*, but examination of my brief field notes 'black cap, cinnamon back' indicate that the observation undoubtedly referred to *caledonicus*. Rufous Night Heron is widespread in Wallacea, Australasia to Java and the Philippines (Coates & Bishop 1997).

OSPREY *Pandion haliaetus*
Relatively frequent on coasts with six records of singles at Kumur, Batumerah and Terbang Selatan. Osprey is generally uncommon in the Lesser Sundas (Coates & Bishop 1997) and rare in Timor-Leste (CRT unpubl.).

BRAHMINY KITE *Haliastur indus*
Singles and groups of up to four frequent along the coast and inland to 400 m. Birds in juvenile plumage were recorded at Kelhi and Air Panas on 26 August.

WHITE-BELLIED SEA EAGLE *Haliaeetus leucogaster*
Common and widespread as singles and pairs on the coasts of Damar and the Terbang Islands. Four pairs and several singles were observed over 8 km between Wulur to Tanjung Paran (the southernmost tip of the island) on 7 September.

BONELLI'S EAGLE *Hieraaetus fasciatus*
Uncommon in primary evergreen forest and forest edge, with a single observed over forest above Wulur (350 m) on 21 August and one over Wulur on 24 August. A pair of eagles soaring high over Batumerah on 30 August was probably this species. Subspecies *renschi* is endemic to the Lesser Sundas (Coates & Bishop 1997).

SPOTTED KESTREL *Falco moluccensis*
An uncommon bird: just three singles observed in secondary habitat.

RUDDY TURNSTONE *Arenaria interpres*
One in breeding plumage on a beach at Terbang Selatan on 8 September. During southbound migration this Holarctic wader is generally an uncommon and rapid transient through the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

BARRED DOVE *Geopelia maugei*
This Wallacean endemic was surprisingly uncommon and local in coastal woodlands adjacent to mangrove, with two observations and a vocal record at Wulur and Batumerah. In the Lesser Sundas it is typically abundant in second growth and woodland (Coates & Bishop 1997).

BRUSH CUCKOO *Cacomantis variolosus*
A cuckoo heard calling (*fear a fear*) in agricultural land near Wulur on 15 August was probably Brush Cuckoo, but there were no observations or further aural records.

Brush Cuckoo departs Australia in April–October when it is widespread in south-east Wallacea including on Kisar and Kai (Coates & Bishop 1997).

AUSTRALIAN KOEL *Eudynamys cyanocephala*
The species' distinctive calls were heard in dry forest on Terbang Utara, but no direct observations.

***CHRYSOCOCCYX* SP.**
A cuckoo calling on Terbang Utara with an accelerating trill of 1.5–2.0 seconds (unlike that of Little Bronze Cuckoo), but not seen or tape-recorded, was probably Pied Bronze Cuckoo *C. crassirostris*, which taxon was recently regarded as a subspecies of Little Bronze Cuckoo (Payne 2005). The closest populations are on the Babar Islands, 125 km to the south-east (Coates & Bishop 1997). The call of Pied Bronze Cuckoo is described as a very rapid trill of 3–6 seconds that swells in volume and then fades (Coates & Bishop 1997).

BARN OWL *Tyto alba*
Numerous, mostly aural, records of *Tyto* owls, initially identified as Barn Owl *Tyto alba* (I was unfamiliar with masked owls at the time). The call was a harsh screech, typical of *Tyto*. However, the single observation of a bird perched at 16 m in the understorey of tall, intact primary forest at Wulur (200 m; 20 August) perhaps involved a masked owl. Barn Owls are infrequently recorded in tropical forest, whilst a masked owl would be more likely in such habitat. Lesser Masked Owl *T. sororcula* is known from Seram, Buru and Tanimbar (Coates & Bishop 1997), but the presence of an undescribed taxon on Damar is plausible. A local man spotted another owl in a coconut plantation near Wulur on 14 August (B. Romode pers. comm.). Testament to their abundance, harsh screeching calls, probably from Barn Owls, were heard from shortly after dusk until dawn, at Wulur (once at 19.40 h), and Kumur (21.05, 23.40, 00.40, 01.20 h)—mostly near forest edge or over gardens. However, at Batumerah a *Tyto* called (at 19.13 h) from a garden plot surrounded by primary forest, and calls on Terbang Selatan (05.50 h) and Terbang Utara (19.45 h) emanated from dense coastal strand and tropical dry forest—probably a less typical habitat for Barn Owl. Typical *Tyto* prey such as rodents (*Rattus rattus* or *R. exulans*?) was abundant in gardens on Damar and Terbang Utara, and might have attracted *Tyto* to such areas. Another prey of masked owls, Common Spotted Cuscus *Phalanger orientalis*, was abundant in forest on Damar, as evidenced by the number of scats on the ground.

RAINBOW BEE-EATER *Merops ornatus*
Five only were observed on Damar at Batumerah, with a flock of *c.*50 on Terbang Selatan. Very common in the Lesser Sundas (Coates & Bishop 1997), these were probably dry-season migrants from Australia, but a resident population is possible.

BLACK-FACED MUNIA *Lonchura molucca*
Apparently rare with just three observations of 3–15 in degraded coastal habitat. On Terbang Utara finches were heard above the beach but not observed, thus their specific identity was unconfirmed. Widespread in Wallacea and generally common, but uncommon on nearby Timor (Coates & Bishop 1997).

Discussion

Most Banda Sea islands have not been surveyed in more than 100 years and beg more attention (see Table 4; also Trainor & Leitão 2007). The Damar avifauna recorded in 2001 differed substantially from that reported by 19th-century collectors. Fifteen species were added to the island list (excluding the islets, not visited by the collectors), but a further 19 species recorded earlier were overlooked, as either seasonally absent or having become locally extinct (see Appendix). For instance, three monarchs collected in the 1890s went unrecorded in 2001. Black-bibbed Monarch *Monarcha mundus* is still one of the commonest forest birds on nearby Yamdena (Bishop & Brickle 1998), but members of this group, including the other missing species, Island Monarch *M. cinerascens* and Broad-billed Flycatcher *Myiagra ruficollis*, often exhibit highly localised distributions (Butchart *et al.* 1996, Moeliker & Heij 1995). Status updates on these birds, as well as Kai Cicadabird *Coracina dispar* and Tricoloured Parrotfinch *Erythrura tricolor* would be valuable. A 'fine series' of Kai Cicadabird was taken on Damar by Kühn, but it seems to be a particularly inconspicuous species and was either overlooked by the current survey or has been extirpated; it is rare on nearby Yamdena (Hartert 1900, Coates & Bishop 1997). On Damar, Metallic Starling *Aplonis metallica* is represented by the distinctive race *circumscripta*, which has not been recorded since the 19th century (Forbes 1884, Bishop & Brickle 1998). Further searches are needed for this taxon. Only *Tyto* owls were heard calling at night, but specific searches for *Ninox* and *Otus*

TABLE 4
Survey effort, island area and number of restricted-range (RR) birds on selected Banda Sea islands.

Island	Area (km^2)	Number of restricted-range spp.	Last survey year (reference)
Wetar	2,684	22	1902, 1990 (Hartert 1904, Coates & Bishop 1997)
Kisar	98	5	1901, 2001 (Hartert 1904, Trainor 2003)
Romang (group)	*c.*240	12	1902 (Hartert 1904)
Leti	100	7	1902 (Hartert 1904)
Moa	349	9	1902 (Hartert 1904)
Lakor	100		Never surveyed
Damar	198	15	2001, this survey
Sermata	188	5	Hartert (1911a)
Babar (group)	*c.*700	15	1905 (Hartert 1906a, 1911b)
Luang	70	3	1906 (Hartert 1906b, 1911c)
Tanimbar (group)	*c.*5,000	22	1993, 2000 (Jepson *et al.* 2001; P. Wood pers. comm.)

owls using playback might yield interesting results in light of the dearth of knowledge of these species in Australasia (Debus 2002, Olsen *et al.* 2002, Indrawan & Somadikarta 2004). During the survey there was no response by *Ninox* owls to calls of Southern Boobook *N. novaeseelandiae fusca* (from Timor), but any *Ninox* on Damar might have different vocals. I found *Tyto* owls to be common on Damar, with numerous aural records. The observation of a *Tyto* in forest was more likely a masked owl, though extralimitally Barn Owls do occasionally use primary forest (D. James pers. comm.). Future surveys should target masked owls to confirm their presence or absence.

Damar Flycatcher was observed for the first time in 103 years. The most important factor determining its occurrence was the presence of tropical forest. It was absent from secondary forest and extensive crop and plantation lands directly adjacent to villages, but was recorded frequently in or around tropical semi-evergreen forest at 60–100 m and true evergreen forest above *c.*100 m, in broadly the same areas as reported by Kühn in 1898. There were no records from dry forest, but this habitat was relatively poorly sampled (Table 1) and occupies just *c.*5% of the estimated 14,850 ha of closed-canopy forest on the island. To simplify matters, I assume that Damar Flycatcher does occur in dry forest and, because it provides relatively limited potential Damar Flycatcher habitat, contributes little to a population estimate. Records were obtained from all three sites which I was able to extensively survey during early to mid morning, but not from 'Wulur, 3 km southeast', with similar habitat but which was accessed opportunistically just once at noon. The frequency of direct observations and aural records suggests that, in forest, Damar Flycatchers have a relatively high population density.

Very few population estimates are available for *Ficedula* anywhere in Wallacea, but Jones *et al.* (1995) estimated that of Sumba Flycatcher *F. harterti* at 0.67 birds/ha. If this value is (albeit crudely) transposed to Damar and multiplied by the estimated forest cover of 14,850 ha, it would give an island-wide population estimate of 22,164 birds. At a similarly conservative estimate of one pair/ha, the population would number 14,850 pairs. Taking the range of values yields an overall population of *c.*20,000–30,000 birds. Damar Flycatcher densities may vary with forest type, elevation and perhaps slope, and these aspects should be considered when designing surveys for this bird.

Since Kühn's visit, forest cover has declined by *c.*25%, to 14,850 ha. Assuming it was close to 100% in the 1890s, and that most of the Damar Flycatcher population displaced from land subsequently converted to agriculture died out, the total population may have shrunk by approximately the same percentage.

Damar Flycatcher was previously classified as Vulnerable (D2) (BirdLife International 2001), a status applied because the number of localities at which it was known was considered sufficiently few to make it prone to the effects of human activities or stochastic events within a very short time period. The most plausible real threat is further deforestation, which is likely to occur through small-scale subsistence agricultural clearance, rather than large-scale commercial logging, and

hence is unlikely to lead to rapid habitat loss in the near future. *F. henrici* therefore should no longer should be classed as Vulnerable under D2. I recommend reclassification as Near Threatened, as it probably approaches the threshold for Vulnerable under criterion C1 (10,000 mature individuals and declining by >10% in ten years) but not under criteria A (population reduction of >30% over 10 years or three generations), or B (extent of occurrence below a critical 200 km^2 but habitat not severely fragmented and on current information not undergoing (rapid) continuing decline; nor is there extreme fluctuation in habitat quality or number of locations occupied, subpopulations or individuals). However, the area and condition of habitat should be monitored, and further surveys are required to refine my preliminary (and crude) population estimate.

At community level, the main long- and medium- to short-term threats to Damar's avifauna are vulcanism, illegal logging and forest conversion for agriculture, predation by introduced rats, and hunting for bush-meat and trade. Earthquakes and volcanic eruption are potential threats to all forest biota on Damar. The island is close to the edge of the Indo-Australian plate and consequently in one of the most seismically active regions on Earth. Wurlali is an andesitic stratovolcano that last erupted in 1892, but in 1993 earthquakes resulted in landslides and local forest loss (<50 ha). A major eruption of Wurlali poses a high but unpredictable risk to forest; the presence of a 5 km-wide caldera is testament to the explosive power of past eruptions.

There is no history of commercial logging on Damar, but timber is cut illegally and sold to Chinese-Indonesian traders on Damar with trade links to markets in Kupang (West Timor), Ambon, Saumlaki (Tanimbar Islands) and Java. I observed no large-scale timber operations, but modest volumes (*c*.5–10 m^3) were being loaded onto a ship as I departed. At Wulur and Batumerah, the establishment of many new shifting agriculture plots (*c*.0.3–1.0 ha each) in primary forest has caused direct forest loss and, historically, forest has been lost from much of the settled north-east. High-grade timber is also selectively harvested for subsistence-level house and dugout canoe construction, and timber is often cut and traded during the preparation of shifting agriculture plots.

Most of the globally Near-Threatened, restricted-range and forest-dependent species maintain relatively high population densities on Damar and appear at little risk of imminent extinction. Some are under-recorded for behavioural reasons. Cinnamon-banded Kingfisher is an inconspicuous species that typically calls in chorus only at dawn and dusk, and appears to have been much overlooked by visiting birdwatchers in the Lesser Sundas. It is under no threat of extinction on Damar or Timor (CRT unpubl.). Among non-forest birds, the status of Beach Thick-knee is poorly known in Wallacea, but a significant local population exists on the Terbang Islands. All pigeons, Orange-footed Scrubfowl and both parrots, in contrast, are selectively targeted using air rifles, slingshots, set snares and fish-nets. Bird trapping and trade in 2001 appeared low-level because communal violence had disrupted the main regional bird market at Ambon. However, two forest-dependent

hole-nesting parrots, Blue-streaked Lory and Olive-headed Lorikeet, continue to be targeted, being sold to passing ships or taken directly to markets. The small population of Blue-streaked Lory (at least), fidelity to nest sites and ease of capture in flowering trees increases the susceptibility of these parrots to decline. Better population estimates are needed for the Near Threatened Blue-streaked Lory and Olive-headed Lorikeet on Damar, and updated information on trade throughout their ranges and at national markets would be valuable.

Large birds targeted for bush meat (Orange-footed Scrubfowl and *Ducula* pigeons) have declined near villages. The annual take of Blue-tailed Imperial Pigeon, crudely estimated (*c.*20 per day over 352 days) at *c.*7,000 individuals, might be below natural recruitment levels, based on its extraordinary abundance in forest. This pigeon is endangered by hunting on Sangihe, north of Sulawesi (Riley 2002). Pink-headed Imperial Pigeon is also hunted, as throughout its range, but maintains strong populations on Damar and the Terbang Islands.

On Damar introduced rats, probably Ship Rat *Rattus rattus*, were abundant in forest and particularly Terbang Utara. I suspect their involvement in the decline of colonial-nesting species such as Metallic Starling, and perhaps the absence of certain small-island flycatchers and monarchs.

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APPENDIX

Species recorded for Damar Island at three main and five minor sites, with data concerning species collected during visits in the 1890s from Hartert (1900). Species recorded in 1898, but not in 2001 are denoted '0'. Note that Brown Goshawk *Accipiter fasciatus* is listed for Damar by Finsch (1901) but I did not locate a specimen; Meyer (1884) noted *Urospizias torquatus* (a synonym for Brown Goshawk), which Hartert (1900) corrected to *Astur polionotus* (a synonym for Variable Goshawk *A. novaehollandiae*).

	1883/1884 collection	1891 collection	1898 collection	Batumerah forest	Awehnyo coast	Kumur	Bebar Timur	Wulur	Wulur, 3 km SE	Terbang Utara	Terbang Selatan
Fregata minor Great Frigatebird								x		x	x
Fregata ariel Lesser Frigatebird						x				x	x
Phalacrocorax sulcirostris Lttle Black Cormorant				x		x					
Phalacrocorax melanoleucos Little Pied Cormorant											x
Sula sula Red-footed Booby			0								
Egretta sacra Pacific Reef Heron			x	x		x		x		x	x
Bubulcus ibis Cattle Egret			0								
Butorides striata Striated Heron						x					
Nycticorax caledonicus Rufous Night Heron								x			
Pandion haliaetus Osprey					x			x			x
Aviceda subcristata Pacific Baza			x					x			
Haliastur indus Brahminy Kite					x	x	x	x	x	x	x
Haliaeetus leucogaster White-bellied Sea Eagle					x	x	x		x	x	x
Accipiter fasciatus Brown Goshawk						x	x	x			
Accipiter novaehollandiae Variable Goshawk	x		x		x	x	x	x	x		x
Hieraaetus fasciatus Bonelli's Eagle								x			
Falco moluccensis Spotted Kestrel							x	x			
Megapodius reinwardt Orange-footed Scrubfowl			x	x	x	x	x	x		x	x
Rallina tricolor Red-necked Crake			0					?			
Amaurornis phoenicurus White-breasted Waterhen			0								
Pluvialis fulva Pacific Golden Plover			x								x
Numenius phaeopus Whimbrel			0								
Limosa lapponica Bar-tailed Godwit			0								
Tringa nebularia Common Greenshank			0								
Actitis hypoleucos Common Sandpiper			x		x			x		x	x
Heteroscelus brevipes Grey-tailed Tattler			0								
Arenaria interpres Ruddy Turnstone											x
Calidris tenuirostris Great Knot			0								
Esacus neglectus Beach Thick-knee										x	x
Columba vitiensis Metallic Pigeon			x	x		x		x			
Macropygia magna Barred-necked Cuckoo-Dove				x	x						
Chalcophaps indica Emerald Dove			x		x	x	x	x	x	x	x
Geopelia maugei Barred Dove					x			x	x		
Ptilinopus cinctus Black-backed Fruit Dove			x	x	x	x		x	x	x	x
Ptilinopus regina Rose-crowned Fruit Dove		x	x	x	x	x	x	x		x	x
Ducula concinna Blue-tailed Imperial Pigeon	x	x	x	x	x	x	x	x	x		x
Ducula rosacea Pink-headed Imperial Pigeon		x	x	x	x		x	x	x	x	x
Eos reticulata Blue-streaked Lory			x	x		x		x	x		
Trichoglossus euteles Olive-headed Lorikeet		x	x	x	x	x	x	x			
Cuculus saturatus Oriental Cuckoo			0								
Cacomantis variolosus? Brush Cuckoo								x			
Chrysococcyx minutillus Little Bronze Cuckoo			x	x	x	x	x	x	x		
Chrysococcyx sp. bronze cuckoo										x	
Eudynamys cyanocephala Australian Koel										x	
Tyto spp. Barn/masked owl				x		x		x		x	x

Collocalia esculenta Glossy Swiftlet			x	x	x	x	x	x	x	x	x
Halcyon chloris Collared Kingfisher			x		x		x	x	x	x	x
Todiramphus australasia Cinnamon-banded Kingfisher			x	x		x	x	x	x		
Merops ornatus Rainbow Bee-eater				x							x
Eurystomus orientalis Common Dollarbird			x			x	x				
Pitta elegans Elegant Pitta	x		x	x		x		x		x	
Hirundo rustica Barn Swallow		x		x		x		x		x	
Motacilla cinerea Grey Wagtail			0								
Anthus gustavi Pechora Pipit			0								
Coracina novaehollandiae Black-faced Cuckoo-Shrike		x						x			x
Coracina dispar Kai Cicadabird			x								
Zoothera peronii Orange-banded Thrush			x	x	x	x	x	x	x		
Gerygone dorsalis Rufous-sided Gerygone			x	x	x	x	x	x	x	x	x
Ficedula henrici Damar Flycatcher			x	x		x		x			
Monarcha cinerascens Island Monarch			0								
Monarcha mundus Black-bibbed Monarch			0								
Monarcha trivirgatus Spectacled Monarch			x	x	x	x		x	x		
Myiagra ruficollis Broad-billed Flycatcher			0								
Rhipidura rufiventris Northern Fantail		x	x	x	x	x	x	x	x		x
Rhipidura rufifrons Rufous Fantail		x	x	x	x	x	x	x	x	x	x
Pachycephala pectoralis Golden Whistler			x	x	x	x		x	x		
Pachycephala leucogastra White-bellied Whistler			x	x	x		x	x	x	x	
Aplonis metallica Metallic Starling			0								
Lichmera squamata Scaly-breasted Honeyeater		x	x	x	x	x	x	x	x	x	x
Dicaeum maugei Red-chested Flowerpecker			x		x	x	x	x	x		
Zosterops citrinellus Ashy-bellied White-eye		x	x	x	x	x	x	x	x	x	x
Erythrura tricolor Tricoloured Parrot-finch			0								
Lonchura molucca Black-faced Munia					x			x	x	?	

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The genus *Macropygia* Swainson, 1837, and its type species

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Swainson (1837) listed three species under his new genus, *Macropygia*, so the type species is to be found in subsequent designation. Schodde & Mason (1997: 23) came to the conclusion that Selby (1840) designated *Columba phasianella* albeit 'without author and date'. This view contradicts previous views and the treatment in Peters (1938), and thus disrupts stability. We have examined Selby (1840) and are unconvinced that Selby made a valid designation, principally because Swainson's use of 'pl. col. 100' should be integral to any such decision, or at least to its interpretation, and by its omission the identity of the selected form became ambiguous.

Erection of the genus *Macropygia*

When Swainson (1837) erected the genus *Macropygia*, now accorded nine or more species restricted to Asia, Australasia or the archipelagos between them, he included only '*Columba phasianella* Temminck, [1821–22], *Columba infuscata* Lichtenstein, [1823], and *Columba reinwardii* [*sic*] Temminck, [1822]'. The second of these is a junior synonym of *Columba plumbea* Vieillot, 1818, and is, as Swainson indicated, from Brazil; the third was given a genus of its own (*Reinwardtoena*) by Bonaparte (1854), leaving just *Columba phasianella* in Swainson's genus based, it is thought, on the views of Gray (1840) or Selby (1840). But what *is* the '*Columba phasianella* Temminck' of Swainson?

Swainson (1837) made clear that he referred to *Columba phasianella* as it had appeared in 'Pl. col. 100', in the same way mentioning 'ib. [ibidem = Pl. col.] 248' for *Columba reinwardii*. That this has been overlooked is at the root of the need to reaffirm the identity.

Temminck used the name *Columba phasianella* in two distinct ways

The cuckoo-doves concerned here are widespread and most of their species are usually treated as polytypic although their relationships are disputed. Peters (1937: 79–80) considered *Macropygia phasianella* a wide-ranging species with subspecies in the Philippines, the Greater and Lesser Sundas, and Australia, but excluded Moluccan birds; Dickinson (2003: 162) recognised a different broad species, omitting Philippine birds (*tenuirostris* Bonaparte, 1854), but including Moluccan ones, and for this species it is necessary to use the earlier name *amboinensis* Linnaeus, 1766. Whatever the treatment, the forms present in Australia, the Philippines and the Moluccas resemble one another quite strongly. Temminck's first description of '*Columba phasianella*' appeared in a paper describing several new pigeons largely from the collection of the Linnean Society of London and related to the Australian taxon. However, by about 1820, specimens were also known from Java and the Philippines and, with the description of *Columba amboinensis* by Linnaeus also available, the similarities referred to earlier must have been apparent to Temminck. His views seem to have evolved from believing that he had found an adult of the same species as that which he had described from a young Australian bird, necessitating the placement of his name *phasianella* in the synonymy of a Linnean name (*amboinensis*), to believing there to be two different species. In the *Planches coloriées* Temminck (1821) had a cuckoo-dove illustrated in Plate 100 which on the wrapper he called *Columba amboinensis*, but in subsequently providing text for this, he used the name *Columba phasianella* thereby implicitly excluding birds from Amboina. Temminck (1839) seems to have been confused by his earlier treatments and in the Tableau Méthodique appears to revert to treating *phasianella* as a synonym of *amboinensis* (the name on the wrapper of livraison 17, holding pl. 100).

The importance of the plate in the *Planches coloriées*

This plate, Pl. 100 of the *Planches coloriées*, appeared as part of livraison 17 in December 1821 (Dickinson 2001: 46). Throughout the *Planches* the only names on the plates themselves were French vernacular names. The original names relating to all the first 20 livraisons (120 plates) appeared on the wrappers and were reported by Froriep (1821, 1822). Froriep (1822) reported that Pl. 100 was of '*Columba Amboinensis* (Linné) der ostindische Archipelagus und Java' a form of words that might or might not then have been inclusive of 'New Holland', now Australia. This phrase, in German, suggests Froriep (1822, October) drew on the French text on the wrapper, not now known to exist, for the *terra typica* and not on the text; the reporting structure used is exactly like that of Froriep (1821), where he had only the wrappers to draw upon. The texts for the plates included in this livraison appeared about August 1822 (Stresemann 1922, Dickinson 2001: 22) and the wording of Froriep (1822, October) makes clear, without being specific, that texts for some of the earlier *Planches coloriées* had begun to appear. The texts for livraisons 16–25 reached Lichtenstein in Berlin on 22 August 1822 (Stresemann 1922), and it is conceivable that Froriep may have seen the texts for livraison 17, however the text is entitled *Columba phasianella* (and this is *not* the name used by Froriep).

In this text Temminck began by mentioning the young bird killed in 'la Nouvelle-Hollande', which he had described earlier in the *Transactions of the Linnean Society of London*. He then went on to discuss the range of the 'species', stating that it appeared to be distributed in most of the islands which form the archipelagos of the Sundas, the Moluccas and the Philippines. This incorporates Java as well as the Philippines and, one would suppose, Amboina too (yet the earlier name for the Amboina bird was not retained). Temminck next described the adult, making clear in his heading that this was the subject of his plate; after that he described the young. The first lines of Temminck's belated text suggest that the bird from New Holland must have provided his description of the young. His further comments make clear that specimens in either Paris or the 'Pays-Bas' (implying Leiden) were used for the description of the adult and provided the model for the plate, but Temminck did not clarify whether the bird depicted was a Leiden specimen from Java, or perhaps Amboina, or one from Paris, where the artist was based and where there was a specimen from the Philippines.

What Temminck wrote in his text, to which Swainson *did not* refer, is less relevant to the correct association of the name than the identity of the bird depicted in pl. 100 to which Swainson *did* refer.

Gray (1840) listed the genus *Macropygia* and enumerated two nominal species '*M. amboinensis* (Lath.) [*sic*], *C. phasianella* Temm., Pl. col. 100'. He may have thought these one and the same, as the Tableau Méthodique might be taken to mean, but he does not say so. Of these two only the latter had been included in the three listed by Swainson (1837), but under Art. 69.4 of the Code (ICZN 1999) fixation by elimination does not in itself constitute type fixation. Bonaparte (1854: 1111) said

of *M. tenuirostris* of the Philippines ' . . . et c'est elle qui a servi de type à la Pl. 100 de la prétendue ['so-called'] *phasianella* des planches coloriées'. This phraseology confirms only that this specimen was the model for the plate.

Wishing to confirm that Bonaparte's judgement was sound we established first that the specimen used for Pl. 100 is still extant in the Museum nationale d'Histoire naturelle, Paris. It can be traced from the museum's specimen registers (in the Ancien Catalogue as No. 11398 and, renumbered C.G. 2002–546, in the more recent Catalogue Générale). One of us (CV) compared this specimen and Pl. 100 from the *Planches Coloriées*. She found the specimen and the depiction very similar, in particular the dark brown of the central rectrices appeared identical to the dark brown of the back and the folded wings in both the plate and the specimen. The single Australian specimen of *phasianella* in the Paris collection (MNHN C.G. 1931–997) differs in having the tail-feathers reddish brown, contrasting with the darker back, as well as being considerably paler than the tail in the Paris specimens of *tenuirostris*. However, Pl. 100 represents the metallic colouring on the hindneck and the upper mantle quite forcefully, but this is now scarcely visible in C.G. 2002–546, as is the case with all the Paris specimens, so either the painter exaggerated the importance of this or, more probably, had the light shining on a fresh skin which has since faded and lost its sheen. The colour of the feet, reported by Bonaparte (1854) to be 'roux' (rufous), and not readily visible in the plate, compares with a rather brown appearance today. Nevertheless, overall, the closer match is with *tenuirostris*.

Salvadori (1893: 335) listed '*M. phasianella*' as type, making no mention of an author or of the critical 'pl. col. 100'. Readers of Salvadori's account would thus have presumed that the Philippine form, therein treated as *tenuirostris*, was not the type species. The first substantive subsequent designation occurred in Mathews (1920: 9), where he stated '*C. phasianella* Temminck, Planch. Color. 1821 not Trans. Linn. Soc., Lond. 1821 = *M. tenuirostris* Bonaparte.' Peters (1937: 75) followed this lead and identified the type species as *Macropygia tenuirostris* Bonaparte (in its identity as '*Columba phasianella*' Temminck in the text to Pl. Col. 100). Peters cited Salvadori (1882: 132) but what we find there contradicts any implication that Salvadori agreed or that he fixed the type species. Salvadori's label for the type species is merely *Columba phasianella* with no mention of Pl. Col. 100. The action taken by Mathews (1920: 9) appears to us to fit the requirements of Art. 69.1 of the Code.

It is indeed doubtful that any of the above was in dispute until Condon (1975: 166) made the statement: 'type (by subsequent designation) *C. phasianella* Temminck, 1821.' Obliquely linked to 'Trans. Linn. Soc. Lond. 13: 129—near Port Jackson, NSW.' as listed by Condon, on the same page, under *M. amboinensis phasianella*. It would appear that from this rather casual beginning the entire (recent) history of this debate has arisen.

We do not accept the view of Schodde & Mason (1997: 23) that Swainson's deliberate qualification 'pl. col. 100' can be ignored as it was by Wardlaw Ramsay

(1890) and Salvadori (1882, 1893). We do accept that it is demonstrable that Gray (1840) failed to designate a type species and that Gray (1855: 99) put forward an ineligible species. It remains our view that Selby (1840) did not validly select a type species and would argue that if he did so his use of *phasianella* must be conditioned by the qualifying 'Pl. Col. 100' imposed by Swainson with the meaning that he indicated the bird depicted and not the later text to that plate. We therefore accept the subsequent designation of Mathews (1920: 9) as correct and valid under Art. 69.1 of the Code.

The correct citation of the generic name and of its type species

Macropygia

Macropygia Swainson, 1837. *On the natural history and classification of birds*, 2, p. 348.

Type, by subsequent designation, Mathews, 1920, *Birds of Australia*, supplement 1, p. 9. *Columba phasianella* Temminck, 1822 [text partim], pl. col. 100 (1821) = *Macropygia tenuirostris* Bonaparte, 1854, nec *Columba phasianella* Temminck, 1821, *Trans. Linn. Soc. Lond.*

Macropygia tenuirostris Bonaparte, 1854

Columba phasianella Temminck, 1822 [text partim], is a junior homonym of *Columba phasianella* Temminck, 1821.

Postscript

It was suggested, by one of our referees, that Art. 70.3.2 of the Code (Misidentified type species) could apply in this case. On pursuing this line of reasoning, however, it became apparent that this should only apply if a type designation erroneously cites the wrong nominal species, but as we contend here, any 'misidentification' has been on the part of later authors, and not Swainson's list of included nominal species, nor the subsequent designation by Mathews.

Acknowledgements

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First records of Red-eyed Thornbird *Phacellodomus erythrophthalmus ferrugineigula* and Pale-breasted Thrush *Turdus leucomelas* for Uruguay

by Jorge Cravino & Santiago Claramunt

Received 27 November 2006

We report two new resident species for north-west Uruguay based on surveys *c.*20 km south-east of Rivera city, between the Cuchilla de Santa Ana in the north-east (the Uruguay/Brazil border) and Cuñapirú stream in the south-west, dpto. Rivera. Natural habitats include campo grasslands, gallery forests and other riparian habitats along the main watercourses, cliff forest at the base of tablelands and plateaux, and isolated patches of swamp forest. Main economic activities are traditional cattle ranching and forestry. Between 22 February 2001 and 2 March 2002 we conducted biodiversity surveys of lands owned by the forestry company COFUSA, which operates *c.*50,000 ha of *Eucalyptus* and *Pinus* plantations, most of them younger than 20 years old. We surveyed birds by direct observation, sound-recording, mist-netting and collecting, during ten trips totalling 37 days. Specimens are deposited in the Museo Nacional de Historia Natural y Antropología (MNHN) in Montevideo.

Species accounts

RED-EYED THORNBIRD *Phacellodomus erythrophthalmus ferrugineigula*
An adult male (MNHN 5952) was mist-netted in an oxbow swamp of Cuñapirú stream, estancia Trinidad (31°01'S, 55°29'W), on 23 February 2001. On 18 November 2001, a second bird was caught there. On 9 March 2001, an adult male (MNHN 5965) and young female (MNHN 5964) were mist-netted in Bañado de los Alazanes, in the same estancia (30°59'S, 55°28'W). We also heard vocalisations at estancia Batoví (31°02'S, 55°25'W) on 10 August 2001, and at Bañado de los Chanchos (31°03'S, 55°26'W). Our specimens refer to *P. e. ferrugineigula*, which is postulated to be specifically distinct, based on differences in plumage, habitat and vocalisations (Ridgely & Tudor 1994, Remsen 2003).

At the headwaters of Bañado de los Alazanes (30°59'S, 55°26'W), we found two active nests, 300 m apart, in *Citronella congonha* trees (Icacinaceae) at the border of swamp forest and *Baccharis* sp. thickets (Asteraceae). Both nests were pensile, attached to the distal part of low branches (1.1 and 1.4 m above the water), which curved downwards at angles of 45° and 70° to the vertical trunk. Branches with green leaves protruded from the nest's roof and lateral walls indicating extensive structural support. Nests were boot-shaped like that of other *Phacellodomus* (Narosky *et al.* 1983, Sick 1984), but relatively small (nest 1: length 32 cm, height

22 cm; nest 2: length 29 cm, height 23 cm, width 13 cm). They differed from all other *Phacellodomus* nests, including *P. e. erythrophthalmus*, in being of dry stalks and non-lignified twigs (2–4 mm diameter), instead of woody sticks. The nest chambers were directly below the branch bifurcation, and the entrances (4 cm diameter) faced outwards from the tree trunk. As in congeners (Narosky *et al.* 1983, Sick 1984, Zyskowski & Prum 1999), both had an antechamber between the entrance and incubation chamber.

We found the first nest on 19 November 2001. Nearby, we heard a pair alarm-calling from dense *Baccharis* shrubs. On 5 December we flushed an adult from the nest and found two hatched eggs in the antechamber. When the second nest was found on 6 December, it also contained two hatched eggs in the antechamber. In February 2002 both nests were abandoned and partially destroyed, but we observed three birds (presumably a family) in *Eryngium pandanifolium* (Apiaceae) and isolated shrubs in the marsh.

P. erythrophthalmus was considered endemic to the Brazilian Atlantic Forest (Stotz *et al.* 1996, Silva *et al.* 2004). In Rio Grande do Sul, the species reaches the south-eastern hills (Belton 2000), 200 km east of estancia Trinidad. Recent records (JC unpubl.; Azpiroz & Menéndez in press) suggest that the species is widespread in north-east Uruguay, but has perhaps been overlooked due to its cryptic habits. The species was mentioned for Uruguay by Azpiroz (2001) and Claramunt & Cuello (2004) based on the present records.

PALE-BREASTED THRUSH *Turdus leucomelas*

Found mostly around the main buildings of estancia Trinidad (30°59'S, 55°26'W), where we saw three feeding on *Schinus molle* (Anacardiaceae) fruits, and it was first recorded on 23 and 25 February 2001, when we collected two specimens (MNHN 5953, 5963), and again on 3 February 2002. On 26–27 October 2001, we saw three feeding on food taken from a trashcan in the garden of estancia Trinidad.

In November–December 2001 a pair nested in Puesto Batoví (31°02'S, 55°26'W). On 3 November we found a nest of sticks and mud with one egg and two chicks in a partially open barn, on a wooden rafter 3 m above ground. On 4 December we found a second nest in a small square opening in a cabin wall, 20 m from the barn. It was constructed of mud and green herbaceous plants. On 27 December it contained three eggs.

Our records are the first for Uruguay. Historical references are ascribable to *Turdus amaurochalinus* (Hellmayr 1934), whilst recent reports (Azpiroz 2001, Claramunt & Cuello 2004) are based on the present records. Our records are also the southernmost of the species and probably relate to *T. l. leucomelas*. The closest populations are those in north-west Rio Grande do Sul (Brazil), *c.*300 km distant (Belton 2000), though Bencke & Grillo (1995) reported new records in eastern Rio Grande do Sul in *Eucalyptus* groves and urban areas, suggesting the species is expanding its range in disturbed landscapes. *T. leucomelas* may benefit from food sources such as trash and fruiting trees near houses, and the availability of buildings

and other man-made structures for nest sites, as *T. leucomelas* is known to use these elsewhere (de la Peña 1989, Clement 2000). Our records are consistent with such explanations in terms of geography, habitat and nest site, and suggest that the arrival of *T. leucomelas* in Uruguay reflects the expansion of anthropogenic habitats.

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CORRECTIONS TO TEXT

Page	44	line	3	*dwighti* not *dwigthti*
"	189	"	11	*Doryfera ludovicae* not *Doryfera ludoviciae*
"	240	"	13	*Chamaeza campanisona* not *Chamaeza campanisoma*

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